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ABSTRACT

Seventy social studies educational games and simulations, designed for K-12th grade, with many applicable to adults, are described and analyzed in the major section of this book. Each of the analyses is divided into eight categories and provides an overview of the game; a description of the physical qualities and cost of the materials; suggested time required to play the game; intended user characteristics; rationale and general objectives; basic concepts, generalizations, trends, themes, or simulated situations which are the basis for the content of the materials; procedural activities and responsibilities of students and teachers; and evaluative comments. Arrangement of the analysis is alphabetically by game title. Games are cross referenced by developer, grade level, publisher, subject area and miscellaneous. In addition to the analyses the book contains: 1) an extensive list of sources and resources on the development and use of educational games including an annotated bibliography of books on simulation design and use, listings of game bibliographies and directories, various developers in the field of social studies, and several newsletters and journals dealing with simulation/games; and 2) an Abbreviated Games and Simulation Guide which includes a list of over 250 games available in social studies education but not analyzed in the previous section of the book. (Author/SJM)

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BALDICER

Market

star power

dangerous parallel

GHETTO

learning
with
g nes

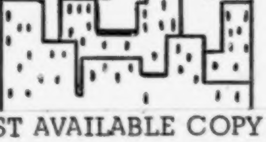
SO005848

an analysis of social studies educational games and simulations

EDITED BY Cheryl L. Charles and Ronald Stadsklev

POWDER HORN

ecopolis



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AN ANALYSIS OF SOCIAL STUDIES EDUCATIONAL GAMES AND SIMULATIONS

edited by

Cheryl L. Charles and Ronald Stadsklev

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PREFACE

In the last decade, simulations and games have come into common use in the classroom. Teachers use them to motivate student learning, to promote student interaction, to present a clearer picture of real-life situations, and to provide an opportunity for direct student involvement in the learning process. These goals are particularly desirable in social studies classes, where the topics of anthropology, economics, geography, history, political science, psychology, and sociology are intimately related to the student's immediate world.

As the use of simulations and games in social studies classrooms has increased, the need for an analytical look at these activities has become apparent. Teachers need to know what can be accomplished by using simulations and whether their students can use them successfully. A number of good directories and bibliographies have been published, but for the most part they contain only brief listings of games available, and little or no information on how and when to use them.

The *Social Studies Curriculum Materials Data Book* was an early attempt at providing such analytical information. First published in October 1971 by the Social Science Education Consortium, Inc. (SSEC), it included analyses of 20 simulations and games. In March 1972 a supplement of 22 games and simulations was added. The March 1973 supplement brought the number of games and simulations analyzed up to 70. The *Data Book* also includes 73 analyses of materials from social studies projects and 42 textbook analyses.

In an effort to make the games and simulations analyses available at low cost to classroom teachers, we are publishing here the 70 analyses contained in the *Data Book*. In addition, we have provided an extensive list of sources and resources on the development and use of educational simulations and games. These include an annotated bibliography of books on simulation design and implementation; and listings of bibliographies and directories, various game developers in the field of social studies, and several newsletters and journals dealing with simulations and games.

The 70 analyses follow the Sources and Resources section. These analyses include games which can be used in a wide range of social studies topic areas and at kindergarten through adult levels. Readers may use the Cross Reference section, following the analyses, to locate games by developer, grade level, subject area, and publisher.

In the Abbreviated Games and Simulations Guide we have attempted to include an exhaustive list of games available in social studies education but not analyzed in the previous section of the book. The Guide contains a listing of 80 producers of over 250 simulations and games and gives brief descriptive information on each item. Many of the games listed in this section are available from Social Studies School Service, 10000 Culver Blvd., Culver City, California 90230, as well as from the publisher.

Major work on the compilation and editing of *Learning with Games* was done by Cheryl L. Charles and Ronald Stadsklev. Charles is currently Social Science Chairman at Trevor G. Browne High School, Phoenix, Arizona. As a former Staff Associate with the SSEC, she did the major editorial work on the *Data Book* and its Supplements. In her capacity as editor, Charles has participated in a majority of the simulations analyzed for the *Data Book*. She has written a number of the analyses and assisted in the compilation of the Sources and Resources section of this book.

Ronald Stadsklev, former Teacher Associate with the SSEC, has been deeply involved in the implementation and use of social studies games and simulations for some time. He has conducted many workshops for teachers on the use of simulations in the classroom and has tested many simulations in his own classes at Concordia Teachers College, Seward, Nebraska. Stadsklev is a contributing editor to *Simulation/Gaming/News*. He has assisted SSEC by identifying games to be analyzed for the *Data Book* and by writing many of the analyses. In addition, he compiled the Abbreviated Games and Simulations Guide.

Besides Stadsklev and Charles, the following people have written analyses of games and simulations: Jack E. Cousins, James E. Davis, Sharon B. Ervin, Frances Haley, Stanley Kleiman, Merle M. Knight, Tedd Levy, Alan Markowitz, Andrea Meier, Fran Pratt, Thomas E. Roberts, Mary Jane Turner, Elizabeth Watford, and Robert Watford.

Mary Jane Turner, who is the current editor of the *Data Book,* edited the 26 analyses which comprise the March 1973 Supplement. My own role has been to give editorial assistance on the *Data Book* and to do the final editorial work and compilation of *Learning with Games*.

We wish to give special thanks to the many SSEC staff members who assisted with the production of this book, particularly the secretarial staff of the SSEC for their long hours in typing the final manuscript, and to Irving Morrissett, Executive Director, for his constant encouragement and support.

Frances Haley
January 1973

SOURCES AND RESOURCES FOR GAMES AND SIMULATIONS

Sources on Design and Use

Games and simulations are a recent and promising addition to social studies classrooms. Described below are a few selected sources which provide insights into the nature, uses, and limitations of games and simulations.

Abt, Clark C. *Serious Games.* New York: The Viking Press, Inc., 1970. 176 pp. *Serious Games* is concerned with games for use in schools, government, and industry. One of the best known games developers, Abt focuses in this book on the objectives and potential benefits of game use, on game design, and on evaluation of gaming.

Adair, Charles H. and John T. Foster. *A Guide to Simulation Design.* Tallahassee, Fla.: Instructional Simulation Design, Inc., 1972. 140 pp. Adair and Foster have outlined systematic specifications and aids for models, media selection, and evaluation in simulation development, for use in formal and non-formal education.

Armstrong, R. H. R. and John Taylor, eds. *Instructional Simulation Systems in Higher Education.* Cambridge, England: Cambridge Institute of Education, 1970. 216 pp. This book is a collection of readings intended to provide an introduction to the use of simulations in higher education. The readings focus on theory, rationale, and case studies of simulations used for educational purposes.

Barton, Richard. *A Primer on Simulation and Gaming.* Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1972. 239 pp. Barton introduces the novice to the field of computer simulation and gives an overview of activities in computer simulation. The reader does not need thorough grounding in mathematics to read and understand the book.

Benson, Dennis. *Gaming: The Fine Art of Creating Simulation/Learning Games for Religious Education.* Nashville, Tenn.: Abingdon Press, 1971. 64 pp. This book provides examples and instructions for teachers and students to construct educational exercises and games. A unique feature of the book is the inclusion of two 33⅓ rpm records describing 11 games as illustrations for potential game designers. Although the title indicates games for religious education, the techniques described by Benson can be used regardless of subject area.

Boocock, Sarane S. and E. O. Schild, eds. *Simulation Games in Learning.* Beverly Hills, Calif.: Sage Publications, Inc., 1968. 279 pp. This book is a valuable resource which encapsulates much of the research and recent thinking on simulation games and their uses in social processes and education. Opposing viewpoints on the usefulness of games are discussed, and directions are charted for further developments in the field.

Carlson, Elliot. *Learning Through Games.* Washington, D.C.: Public Affairs Press, 1969. 183 pp. *Learning Through Games* is one of the easiest and most readable books on educational games. Following an introduction to the uses of simulations and games for instructional purposes, the author deals with case studies of games used in school classrooms. He concludes with a discussion of the effects of games used in schools.

Coplin, William, ed. *Simulation in the Study of Politics*. Chicago: Markham Publishing Company, 1970. 365 pp. Based on a symposium which took place at Wayne State University in 1967, this book is a collection of readings dealing with various models for simulation development. A basic book in political science and gaming, it tends to take an academic approach.

Forrester, Jay. *Urban Dynamics*. Cambridge, Mass.: M.I.T. Press, 1970. 285 pp. This sophisticated book deals with the use of highly computerized simulations. The simulations described are focused on the interrelationships of urban planning.

Forrester, Jay. *World Dynamics*. Cambridge, Mass.: Wright-Allen Press, Inc., 1972. 142 pp. *World Dynamics* discusses the use of simulations to understand the interrelationships of world social systems and world ecology.

Gordon, Alice Kaplan. *Games for Growth*. Palo Alto, Calif.: Science Research Associates, Inc., 1970. 205 pp. In this easy-to-read book, Gordon examines the rationale of game use, discusses the positive and negative aspects of games, briefly describes over 45 games which are available today, gives helpful hints to the teacher who uses games, and reviews the research which has been done on educational games. The book contains a bibliography of games and simulations literature.

Guetzkow, Harold, *et al. Simulation in International Relations: Developments in Research and Teaching*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963. 248 pp. This work is a treatment of the use of simulations in teaching international relations and was written as a follow-up to Guetzkow's work on simulation in social science.

Guetzkow, Harold, *et al. Simulation in Social and Administrative Science: Overview and Case-Examples*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972. 768 pp. The authors review developments of the last decade in simulations in the area of social and administrative science. Case examples of simulations in these areas are presented, and a final section examines methodology and theory in simulation development.

Guetzkow, Harold, ed. *Simulation in Social Science: Readings*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963. 199 pp. A classic in the literature, *Simulation in Social Science* was one of the first books to deal with simulation gaming on a simplified level. Computer simulations as well as non-computer simulations are discussed. This book provides an excellent introduction to uses of simulation in economics, political science, psychology, and sociology.

Hermann, Charles. *Crises in Foreign Policy: A Simulation Analysis*. New York: Bobbs-Merrill Company, Inc., 1970. 234 pp. This is a sophisticated attempt to show how simulation can help in the understanding of international affairs.

Inbar, Michael and Clarice Stoll. *Simulation and Gaming in Social Science*. New York: The Free Press, 1972. 313 pp. Although this book covers the field of simulation and game design, the development of simulations without the use of computers is emphasized. A major portion of the book contains case studies of the actual construction process by well known simulation developers.

Kleitsch, Ronald G. *An Introduction to Learning Games and Instructional Simulations*. St. Paul, Minn.: Instructional Simulations, Inc., 1969. 160 pp. This is one of the most theoretical and scholarly studies of simulation techniques and is rather difficult to read.

Nesbitt, William A. *Simulation Games for the Social Studies Classroom*. New York: Foreign Policy Association, 1971. 144 pp. Nesbitt's book is particularly helpful for classroom teachers as it gives practical explanations of game types and their uses. An annotated bibliography of games and simulations is included.

Raser, John R. *Simulation and Society: An Exploration of Scientific Gaming*. Boston: Allyn and Bacon, Inc., 1969. 180 pp. This is an excellent book for bridging the gap between simplistic interpretations of games and their uses and highly theoretical and sophisticated analyses. *Simulation and Society* provides the reader with an explanation of the scientific bases of simulation, its rationale and history, and the application of simulation and gaming techniques.

Scott, Andrew. *Simulation and National Development*. New York: John Wiley & Sons, Inc., 1967. 177 pp. The primary emphasis in this book is on the author's description of the use and methods of play of four political science games.

Shaftel, Fannie R. and George Shaftel. *Role-Playing for Social Values*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967. 431 pp. The Shaftels clearly explicate the process of role-playing for value clarification, state their objectives, and provide many helpful guidelines for the teacher. Many stories based on problems of individual integrity, group responsibility, self-acceptance, and management of feelings are included for use in role-playing.

Stoll, Clarice and Samuel Livingston. *Simulation/Gaming: An Introduction for Social Studies Teachers*. New York: The Free Press, anticipated release, May, 1973. 128 pp. Following an introduction which provides some background on the growth and significance of simulation and gaming, a variety of articles by game developers are included. Each of the articles is based on the experience of the developers in creating and producing various games.

Tansey, P. J., ed. *Educational Aspects of Simulation*. London: McGraw Hill Publishing Company, Ltd., 1971. 274 pp. Tansey has compiled a series of readings which define simulation and discuss its use in various areas of education, including its possible role in teacher training. The concluding chapter includes sources and descriptions of nearly 100 games and simulations.

Taylor, John L. *Instructional Planning Systems:A Gaming/Simulation Approach to Urban Problems*. New York: Cambridge University Press, 1971. 170 pp. Taylor's book deals with simulation and gaming as it applies to urban problems and urban planning. The author provides historical perspectives, rationale, objectives, problems, and suggestions for future implementation.

Taylor, John L. and Rex Walford. *Simulation in the Classroom*. Baltimore: Penguin Books, 1972. 190 pp. Although the work of Taylor and Walford in games and simulations has been done primarily in England, their book is very useful to social studies teachers in the United States. It contains descriptions of six simulations, an introduction to the process of simulations and games, and suggested references and further reading.

Walford, Rex. *Games in Geography*. New York: Humanities Press, Inc., 1970. 123 pp. Walford sets the stage for the use of simulation and games in teaching geography and then describes six games he has developed. He concludes with a case study of two schools using simulations and a model for developing games and simulations.

Directories and Bibliographies

In addition to *Learning with Games*, the following bibliographies and directories of games and simulations are available:

Kleitsch, Ronald G. *Directory of Educational Simulations, Learning Games, and Didactic Units*. St. Paul, Minn.: Instructional Simulations, Inc., 1969. 175 pp. This directory includes games for military, business, and educational fields. It provides helpful, though not extensive, descriptions of some of the most important aspects of the games.

Lewis, Darrell R. and Donald Wentworth. *Games and Simulations for Teaching Economics*. New York: Joint Council on Economic Education, 1971. 66 pp. Lewis and Wentworth have prepared a bibliography of games and simulations related to the teaching of economics in elementary and secondary schools. In addition to an annotated listing of 92 simulations and games, information on research, evaluation, professional organizations, journals, and newsletters is included.

Social Studies Curriculum Materials Data Book. Boulder, Colo.: Social Science Education Consortium, Inc., 1971- . 338+pp. The *Data Book* contains concise, two-page analyses of social studies project materials, innovative textbooks, and instructional games and simulations. Supplements which include additions and revisions are published every six months. *Learning with Games: An Analysis of Social Studies Educational Games and Simulations* is a compilation of the games and simulations section of the *Data Book*, from March 1971 through March 1973.

Twelker, Paul A. *Instructional Simulations Systems: An Annotated Bibliography*. Corvallis, Ore.: Continuing Education Publications, 1969. 286 pp. Twelker lists approximately 1500 references on simulations and games; he includes annotations or abstracts for the majority of listings.

Twelker, Paul A. and Ken Layden. *Educational Simulation/Gaming*. Stanford, Calif.: ERIC Clearinghouse on Media and Technology, 1972. 19 pp. ED 064 955. Twelker and Layden have compiled a simple and useful guide for classroom teachers detailing the characteristics of games and simulations, an annotated bibliography, and a listing of groups involved in various aspects of simulation and game activity.

Werner, Roland and Joan Werner. *Bibliography of Simulations: Social Systems and Education*. La Jolla, Calif.: Western Behavioral Sciences Institute, 1969. 178 pp. This 2000-item listing includes references for most subject areas concerned with the use or study of games and simulation techniques.

Zuckerman, David W. and Robert E. Horn. *The Guide to Simulation/Games for Education and Training*. 2d ed. Cambridge, Mass. (now at Lexington, Mass.): Information Resources, Inc., 1973. 334 pp. This guide provides brief but useful descriptions of over 600 games and simulations which are available today. Other sections include how to introduce simulation games in courses; how to help students develop their own games; a demonstration session which can be used to introduce simulation gaming to teachers, parents, and students; a chapter with 31 simulations covering trend-setting designs in simulation gaming; and a bibliography by Paul Twelker and Ken Layden.

Major Developers

As the use of simulations and games as an instructional method has become more extensive, the following organizations and individuals have emerged as major developers:

Abt Associates, Inc., 55 Wheeler Street, Cambridge. Massachusetts 02139, was founded in 1965 as a pragmatic "think tank" for the purpose of helping industry, government, and education develop techniques of problem solving. This development is based on the concept of systems analysis coupled with sensitivity to human behavior with a major aspect of the activity being the development of simulations and games. These have been incorporated into other major projects, have been published by educational firms, or are presently being published by Abt's own marketing agency, Games Central. A unique aspect of this organization's work is their policy of developing games under contract; refinement of the game is often left to the client.

Academic Games Associates, Inc., 430 East 33rd Street, Baltimore, Maryland 21218, originated as an outgrowth of the work of the Behavioral Research Division of Johns Hopkins University. Under the direction of Drs. Sarane S. Boocock and James S. Coleman, a series of academic games in the social studies was developed. Research is conducted to analyze the cognitive value of specific games for students of different social and ethnic backgrounds, abilities, and personalities. The project also developed sociological games; six of these are now published by Western Publishing Company, Inc. Academic Games Associates offers a unique service to game developers by evaluating and analyzing simulation structures and gaming mechanics upon request. They also assist teachers and other individuals interested in using games by testing games on specified target populations and creating programs under which schools and school districts can contract for long-term guidance in the introduction of gaming into their curricula.

American Games Association, 460 35th Avenue, San Francisco, California 94121, is an organization composed primarily of people interested in designing and marketing games. The membership is varied, including professional writers, businessmen, classroom teachers, housewives, retirees, firemen, and engineers. The association produces a bi-monthly newsletter and monthly professional news notes.

Center for Simulation Studies, Missouri Theater Building, Room 622, 634 North Grand Avenue, St. Louis, Missouri 63103, has been established to 1) use simulation and gaming techniques to identify the social values operating within the urban system; and 2) stimulate communication between urban interest groups making decisions affecting social values. The Center is not as concerned with creating and developing games as with using existing games to improve urban community relations. The staff conducts sessions for civic groups, church organizations, business organizations, and local schools.

Education Ventures, 209 Court Street, Middletown, Connecticut 06457, has recently moved into the development and publication of simulations and games. Their games are designed to be easily inserted into existing curricula; each game is simple, self-contained, and intended to be used in the instruction of a single concept.

Environmental Simulation Laboratory, 109 East Madison, Ann Arbor, Michigan 48104, is the umbrella for a number of organizations and individuals in the games profession who are located in Ann Arbor. Layman Allen, Fred Goodman, Allen Feldt, Richard Duke, and others are involved in the work of the Laboratory as well as in their own projects, and are referred to as the Games Resource Consortium. The Laboratory has operated for a number of years as a center for using simulation for research and instruction on environmental problems. The work of the Lab centered around computer simulations in the beginning but has since expanded to games development, training programs, and a variety of other endeavors.

Human Services Resource Center, Governors State University, Park Forest, Illinois 60466, is concerned with the use of urban and issue-oriented games with community groups. One of the major efforts of the Center is to develop patterns for effective use of games in urban settings.

Interact, Box 262, Lakeside, California 92040, was founded by David Yount and Paul DeKock, teachers at El Capitan High School in Lakeside, California. They first developed the simulation game called *Sunshine*. They have now developed additional simulation games for use at elementary and high school levels. Each game is developed on a similar format; a three- to four-week outline of activities is suggested as a supplement to a regular course of study and includes cognitive performance tests and research assignments in addition to the simulation activities.

Instructional Simulation Design, Inc., Box 3330, Leon Station, Tallahassee, Florida 32303, has been formed as a nonprofit organization. Its main purpose is to aid simulation designers who have developed valid simulation prototypes or models with superior testing results. They will make modest loans to help support media development and field testing. Future plans are to serve as a clearinghouse for public and private agencies, firms, schools, and others who are involved in media development or who can help in testing simulations.

Instructional Simulations, Inc. (ISI), 2147 University Avenue, St. Paul, Minnesota 55114, was organized by Dr. Ronald G. Klietsch and is one of the largest producers and developers of simulations and games for social studies education. In addition to developing games and simulations, ISI produces case study involvement units, conducts a variety of workshop and training programs, provides information to interested subscribers to their mailing services, and publishes a variety of documents including a regular newsletter, monographs, and books.

Simulations Systems Program, Instructional Development Division, United States International University, Corvallis, Oregon 97330, has as its goals the research, development, and dissemination of simulation and gaming techniques and learning programs aimed at effective planning of mankind's future. Among the activities of the program are the development and dissemination of a future-oriented multidisciplinary studies program for high school and college students; development of empirically tested simulation and gaming techniques; research on learning outcomes of various simulation and gaming techniques; and implementation of workshops and training programs in the use of simulation and gaming for instructional purposes.

Western Behavioral Sciences Institute (WBSI), 1150 Silverado, La Jolla, California 92037, began Project SIMILE in 1965 under the auspices of the Kettering Foundation, in order to explore the educational uses of simulation in the social studies. Several games were developed in rough form and tested in the San Diego School System. Subsequently, SIMILE II was formed—a private concern which operated within the framework of the Institute and now develops, produces, markets, and trains in the use of simulations and games. WBSI's simulation games have strong human relations and group dynamics elements. Early each summer the Institute sponsors a workshop for teachers and other games users.

Newsletters and Journals

A number of journals and newsletters on simulation and gaming are available, in addition to those published by the developers listed above.

Behavioral Simulation and Gaming Newsletter. This newsletter is published by Professor Marshall Whithed, Political Science Department, Temple University, Philadelphia, Pennsylvania 19122, and is free upon request. Many of the articles in the newsletter deal with fairly sophisticated models, often involving computers, aimed at simulation and gaming of political and urban problems.

Didactic Systems Letter. Published monthly by Didactic Systems, Inc., 6 North Union Avenue, Cranford, New Jersey 07016, this newsletter is available at no cost to the subscriber. The *Didactic Systems Letter* attempts to focus on simple and effective instructional techniques, many of which have application to simulation and gaming.

Simulation and Games: An International Journal of Theory, Design, and Research. Sage Publications, Inc., 275 South Beverly Drive, Beverly Hills, California 90212, produces this *Journal* four times a year at a subscription rate of $18.00. The *Journal* normally emphasizes theoretical papers on simulation and gaming research studies related to the field. It regularly includes reviews of new publications and games.

Simulation/Gaming/News. This newsletter is published five times a year at a subscription rate of $4.00 per year. *Simulation/Gaming/News* is the creation of over a dozen leaders in gaming and simulation. Published in an attractive newspaper format, it includes a variety of interesting and practically-oriented articles, advertisements, and graphic effects. The newsletter is available from *Simulation/Gaming/News,* Box 3039, University Station, Moscow, Idaho 83843.

Simulation Sharing Service. Concerned with simulation and gaming activities as they relate to religious education, this newsletter is published nine times each year at a subscription rate of $5.00, and is available by writing *Simulation Sharing Service*, Box 1176, Richmond, Virginia 23209.

Simulation in the Service of Society Newsletter. This newsletter is published by the Social Systems Simulation Group, Box 994, La Jolla, California 92037 at a subscription rate of $12.00 for 12 issues each year. It has an international scope and emphasizes activities in the area of computer-based societal simulations.

Wff'n Proof Newsletter. Wff'n Proof Company produces this newsletter four times a year to focus on activities relating to use of Wff'n Proof gaming materials throughout the United States. Subscription rate is $1.00 per year. The newsletter is available by writing Wff'n Proof Company, 1111 Maple Avenue, Turtle Creek, Pennsylvania 15145.

INTRODUCTION TO THE ANALYSES

Each of the analyses in this book is divided into eight categories:

Overview

The highlights of the game, simulation, or simulation game are briefly cited here.

Materials and Cost

This section is divided into categories which commonly appear in games, simulations, and simulation games. We have used the term Coordinator's Manual throughout the games and simulations analyses to describe any manual or printed guide which has been produced by the developers for use by the instructor. Any materials which serve as a required book or manual for students are listed as a Student Manual. Specific information is provided as to number of pages, dimensions, and binding of Student Manuals and Coordinator's Manuals. Additional materials, if any, are also described concisely.

Required or Suggested Time

Except in cases where the analyst has recommended use of the materials for a period of time which differs from the recommendation of the developers of the materials, the specified time is as suggested by the developers.

Intended User Characteristics

This section specifies required or recommended abilities and training needed by students and teachers in order to use the materials effectively. It also includes specification of physical arrangements and equipment necessary to implement the materials.

Rationale and General Objectives

This section reflects the purpose and underlying philosophies of the developers of the materials in designing their products. It provides a concise statement of student objectives.

Content

This section identifies the basic concepts, generalizations, trends, themes, or simulated situations which are the basis for the content of the materials.

Procedures

The activities and responsibilities of both students and teachers for effective implementation of the curriculum materials are specified and briefly explained.

Evaluative Comments and Suggestions

Since little evaluative data are available for games and simulations, this section is primarily concerned with evaluative statements by the analysts on the basis of their use and observation of the game.

Probably most confusing for a reader of the analyses will be the terminology used. The following simplified definitions have been developed by the editors for use in games and simulations analysis:

Simulation: A hypothetical environment is established which includes elements of social reality; players assume roles.

Game: Rules are established; a goal or goals are set; there is competition among players to achieve the goal; some players win and others lose.

Simulation game: Any combination of elements which exist in both simulations and games is called a simulation game. Once referred to in an analysis, a simulation game may later for convenience be referred to as a game.

Educational game or simulation: Any game, simulation, or simulation game which has educational objectives and is therefore instructional is an educational game or simulation.

Role playing: An individual assumes a role and demonstrates this role through activity which may be rigidly defined, somewhat restricted, or completely unrestricted by instructions given to the player.

Chance factor: Those conditions within the playing of the game, simulation, or simulation game which are beyond the control of the participants are referred to as chance factors.

Following the analyses, a listing of cross references is given. There are five cross reference categories of entries: Developer, Grade Level, Publisher, Subject Area, and Miscellaneous, in that order. Under each category, entries are listed alphabetically. Under each entry is the name of one or more games and simulations associated with the particular entry. The games and simulations are found, listed alphabetically, in the body of the book.

The Abbreviated Games and Simulations Guide which follows the cross references has been compiled to provide basic information about most of the games and simulations which have been developed for use in social studies classrooms. Publisher, subject area, cost, hours of play, and number of players are specified for each game and simulation listed. An asterisk by the title of a game or simulation indicates that an analysis appears in the book.

ABOLITION: AN AMERICAN HISTORY SIMULATION GAME

Developers: Russ Durham and Virginia Durham
Teaching Research
Oregon State System of Higher Education
Publisher: Random House, Inc.
Westminster, Maryland 21157

Publication Date: 1971
Availability: From publisher
Grade Level: 10-12 (7-9)
Subject Area: American History
Number of Players: 18-35

Overview

Abolition is a simulation game which combines American history content, social interaction, decision making, role playing, and some analysis to have students consider the issue of the morality of slavery in the period that followed the passage of the Fugitive Slave Law of 1850. As students assume roles of individual citizens, primarily residents of a northern community called Freeman, they role play emotional conflicts characteristic of that period in American history. The materials for playing this game come in a box that contains a Coordinator's Manual, detailed role play cards, newspapers, information sheets on both the Fugitive Slave Law and Personal Liberty Laws, and other documents.

Materials and Cost

Materials Package:

- Cardboard box, 9½" x 12½" x 2", contains the following:
- Coordinator's Manual: 18 pp., 6" x 9", stapled paper cover; includes an introduction, a discussion of the structure of the exercise, student objectives, additional resources, a list of players, player role sheets, suggestions on how to select players, how to start the game, how to keep the game going, and debriefing and follow-up activities
- Additional Materials: 35 role play cards, 35 identification of roles cards, 20 antislavery wafers, 7 information sheets on the Fugitive Slave Law, 20 information sheets on the Personal Liberty Laws, 10 *Freedom Now* newspapers, 1 sign "City Jail," 1 warrant of arrest, 1 bill of sale, 1 affidavit and endorsement, 1 Law and Order Journal, 1 Preparation for the Defense card, and an acetate transparency of the town of Freeman

Total Package	$35.00

Required or Suggested Time

The Coordinator's Manual suggests that the game be played for approximately two hours. Although the Manual also suggests the preferability of completing the game in one session, it is possible to interrupt game play between any of its six major phases. The briefing should take 30 to 60 minutes and the debriefing one or two hours. The entire game will take approximately one week of class time if used during class periods of about 50 minutes each.

Intended User Characteristics

These materials are suitable for students in 10th-, 11th-, or 12th-grade American history classes. The materials, however, could be used with junior high school history students. It would be helpful, although not essential, if the teacher has substantial background in the history of the U.S. Constitution, 18th and 19th century U.S. history, and an awareness of contemporary racial issues and related legislation.

Rationale and General Objectives

The authors believe that student involvement in an instructional activity such as this simulation game, combining subject matter emphasis, role play, and social interaction, is conducive to meaningful student learning. The information provided in the detailed role play cards and other support materials has been designed to facilitate students' realistic enactment of history. Such an enactment, according to the authors in the Coordinator's Manual, ". . . often awakens students to a new awareness of current controversies and their close relationship to historical realities in the past." The Coordinator's Manual also states that the general objective of the game ". . . is . . . to encourage and sharpen the decision making prowess and analytical thought in the student as he attempts to achieve his role's objectives." The Manual also includes a list of what the developers call behavioral objectives that students may achieve through skillful use of the game.

Content

Students play the roles of fictitious citizens who live in a northern town called Freeman. Each citizen becomes directly involved in the emotional conflict that emerges following the passage of the Fugitive Slave Law in 1850. The interaction begins when the Abolitionists question the morality of slavery and the constitutionality of the Fugitive Slave Law. The concern of representatives of the Local Government is to maintain law and order and to settle the question of states rights versus federal power, particularly with respect to support of the Fugitive Slave Law. While the members of the Public become concerned with questions of economic stability and prejudice, the State Senator attempts to persuade the citizens to support the Fugitive Slave Law and thus preserve the tenuous compromise between the North and the South, effected by the Compromise of 1850. The Fugitive Slave Law is dramatically put to the test when a Southern plantation owner comes to town looking for his runaway slave. The slave goes to jail and interest groups within the town express their concern. A court trial results, followed by a town meeting which finds the citizens attempting to make further decisions concerning their stances with respect to slavery.

Procedures

The teacher introduces the game and assigns each student a role and the appropriate role card. Descriptions of the types of students appropriate for certain of the key roles are included in the Coordinator's Manual. Each student studies his role card and then the teacher briefs the students, using the "Guide to Student Briefing" (a section of the Coordinator's Manual). The actual game play starts when each student follows the directions found on his role card for Phase I of the game. Phase I is devoted mainly to discussions by interest groups (Public, Abolitionists, Local Government) as to how to influence one another. Anthony Burnside, a runaway slave, is arrested in Phase II following appearance in the town by his former Southern owner and two companions. The Abolitionists discuss what to do about the Fugitive Slave Law and receive the news of Burnside's arrest. The Local Government meets with three groups of public citizens to discuss the conflict. In Phase III the participants meet in five separate "encounter" groups to attempt to find and encourage support for each of their views. The setting in Phase IV is a "Court Hearing." All interest groups listen while some witnesses are called to testify in the Burnside case. It is left to the Judge to make a decision about Burnside's fate. Reaction to the Judge's decision occurs in Phase V. Phase VI is a town meeting where decisions and possible action to take are made concerning what is moral, constitutional, reasonable, and just. The debriefing session follows a vote of the male citizens of the town, taken to determine whether to support the Personal Liberty Laws that negate the effectiveness of the Fugitive Slave Law, or to enforce the Fugitive Slave Law.

Evaluative Comments and Suggestions

The game is effective in its efforts to provide students the opportunity to realistically simulate emotional conflicts concerning slavery. The individual role cards, describing 35 possible roles, are well-detailed and explicit in providing direction for the participants without unnecessarily limiting their creativity in playing the roles. Another appealing aspect of the game is its direct application to use in existing junior or senior high school U.S. history courses, even as the basis for an instructional unit. Although the game does not demand extensive teacher preparation, the teacher will need to be alert and constantly coordinating activities within phases. As suggested by the developers, the personalities of students playing assigned roles will have a great deal to do with the success of playing the game and reaching the stated objectives.

AMERICAN HISTORY GAMES

Developer: Alice Kaplan Gordon
Abt Associates, Inc.
Publisher: Science Research Associates
259 East Erie Street
Chicago, Illinois 60611
Publication Date: 1970
Availability: From publisher
Grade Level: 8-12
Subject Area: American History
Number of Players: 25-35

Overview

Developed by Abt Associates, Inc., and intended as a supplement to any American history textbook, this kit is a set of six games dealing with major issues and periods in United States history. The six games require students to become involved with making decisions as if they were living during the historical period in which the game is set. The kit includes game boards, play money, chips, tokens, chance cards, 35 student guides, a Coordinator's Manual, a Spirit Master Book, and acetate sheets to protect game boards. Each of the games within the kit can be used with students from grades 8 through 12.

Materials and Cost

Materials Package:
Cardboard box, 16" x 18" x 4", contains the following:
Coordinator's Manual: 64 pp., 8½" x 11", stapled paper cover; includes introduction, student materials, annotations, and teaching suggestions $ .99
Student Manual: *Student Game Book*. By Alice Kaplan Gordon. 48 pp., 8½" x 11", stapled paper cover $ .99
Spirit Master Book: 8½" x 11", 15 spirit masters $ 6.30
Additional Materials: game boards, play money, chips, tokens, chance cards, 35 student manuals, and acetate sheets
Total Package $187.50

Required or Suggested Time

Each game is designed to take five days of classroom time, with one day for briefing, three days for actual game play, and one day for debriefing. The six games will take a total of 30 days of social studies teaching time during the school year.

Intended User Characteristics

Students of various abilities in junior and senior high school United States history programs should find these materials suitable for their use. Students will need to read their *Game Book* and dittoed information from the Spirit Masters. They will also need to do a great deal of computing for score keeping. The teacher needs a background in United States history. The teacher will also need to spend a number of hours preparing to teach each game.

Rationale and General Objectives

In the Coordinator's Manual, the author says that ". . . educational games introduce greater reality into the classroom. They diminish disparity between school and the real world." She goes on to say that students are motivated to learn if they actively participate in adult decision-making processes. Thus, the purpose of these American history games is to "harness the student's natural inclinations to play and the energy he devotes to it for the serious business of learning." In the process, he will acquire a significant understanding of six different issues in U.S. history.

Content

Each of the six games deals with a major issue in American history. Students always play in teams, with each student assuming the role of some former American. The following briefly describes each of the games.

Colony is a study of economic relationships between the thirteen colonies and England prior to the Revolutionary War.

Frontier is a comparative analysis of economic and political developments in the Northwest and Southwest between 1815 and 1830.

Reconstruction is a study that focuses on the interrelationships of Southern planters, farmers, freedmen, and Congress in the period immediately following the Civil War.

Promotion is a game dealing with industrial growth, urbanization, railroad expansion, and the growth of mechanized farming during the latter half of the 19th century.

Intervention is an examination of the U.S. involvement with Cuba, the Philippines, and the Dominican Republic at the turn of the 20th century and the conflicting interests of congressmen, the State Department officials, military personnel, and businessmen.

Development focuses on the use of foreign aid by modern-day major powers to win the loyalty of neutral and developing countries.

Procedures

The day before a game is played, the teacher gives out the *Student Game Books* and assigns the students to read the rules and become familiar with them. Although this procedure is recommended by the author, she points out in the Coordinator's Manual ". . . that it is unnecessary to understand the rules fully before actual game play begins." Before play of any game begins, the teacher can spend a day briefing the students on what the game is about and the context and content of the rules. This briefing involves determining the problem the game poses and identifying the actors and their specific objectives.

Introduction to the game may begin with the teacher having an actor from each team demonstrate the first action he will take. This demonstration might involve the moving of a chip or the finding of a member of another team to communicate a proposition. Once the first step has been demonstrated, the actual playing of the game commences. Students should ask questions of the teacher throughout the course of the game. In the Coordinator's Manual, the author says, "The teacher is best described as a coach. It is not recommended that the teacher assume a role in the game. His function as coach is too critical." After the students have participated in a number of rounds for two or three days of classroom time, the actual playing of the game ends and the debriefing session starts. The author continues, "Without a postgame discussion, the value of a game is seriously diminished." The teacher and the students discuss the concepts involved and attempt to integrate the game into the United States history curriculum under study.

Evaluative Comments and Suggestions

The teacher's familiarity with this game previous to classroom instruction will be a significant factor in determining successful classroom use. The teacher should study the Coordinator's Manual, the *Student Game Book*, and the Spirit Master Book handouts very thoroughly before attempting to use this game as a teaching device. Further, the teacher should play a round or two of the game with friends, other faculty members, or by himself before classroom instruction is attempted. Because of the nature of the active involvement by students in the playing of the game, the noise level in the classroom will be above normal.

References

Abt, Clark C. *Serious Games*. New York: The Viking Press, Inc., 1970. 176 pp.

ARMADA

Developer:	**Education Development Center** **15 Mifflin Place** **Cambridge, Massachusetts 02138**
Publisher:	**Denoyer-Geppert** **5235 Ravenswood Avenue** **Chicago, Illinois 60640**
Publication Date:	**1970**
Availability:	**From publisher**
Grade Level:	**8-12**
Subject Area:	**History**
Number of Players:	**5-30**

Overview

Based on the historical event in which the English thwarted an attempted invasion by the Spanish Armada in 1588 this game provides for small competitive teams to role play Spanish and English admirals and re-enact the battle on a map. In the game either side may win, and choices of maneuver and strategy may differ considerably from those in the actual confrontation. Strategic decisions are, however, limited by the same conditions of relative strength, level of technology, and weather conditions as those prevailing when the battle was actually fought. The game proceeds through a series of timed rounds in which each side may score gains or losses. The side with the most points accumulated at the end of the game is declared the winner.

Materials and Cost

Materials Package:

Cardboard compartmentalized box, 28" x 19" x 1½", contains the following:

One game pad (60 sheets, 27½" x 18") with maps of English area and scoring forms; 30 player booklets; 6 fire power spinners; 3 boxes of map tacks (red, white, blue); 6 sets (13 per set) of chance cards; 30 sets of rules; and 30 "Who Won?" sheets

Total Package	$34.00
Coordinator's Manual: 53 pp., 7½" x 10", stapled paper cover; detailed procedures for game play are outlined in Teacher's Guide for Unit I, *From Subject to Citizen*	$ 2.50

See Materials and Cost in Education Development Center, *From Subject to Citizen* Data Sheet.

Required or Suggested Time

Preliminary to playing the game, approximately one-half hour is necessary for setting it up and familiarizing participants with procedures. The game can be played in a 45 minute class period; however, a full hour is required to play the recommended ten rounds. At least one more class period should be planned for follow-up activities revolving around the question: "Who Won?"

Intended User Characteristics

An 8th-grade reading level and simple mathematical skills are all that are required to play the game. A general background in the relations of England and Spain in the Elizabethan era would be helpful in making the game more meaningful, but it is best if students are not familiar with the actual battle and outcomes. Physical arrangements require space for from one to six groups of players, five per group, to sit around the game sheets and make their moves. Since each group of five is playing the game separately from the others, no movement between groups is necessary.

Rationale and General Objectives

Armada was developed as one of the activities for *Queen Elizabeth: Conflict and Compromise*, one of five modules making up the course, *From Subject to Citizen*. Like all material designed by the Education Development Center, the game content was designed to involve students in the exploration of a number of general questions through the creative use of evidence. Specifically, the game is meant to illustrate the ways in which power may be used, contrasting styles of leadership and the relationship between power and technology. Players frequently find that technology can be a deciding factor in determining the most appropriate strategies for achieving victory. *Armada* places major emphasis on actualities, with authentic data about a real historical event to enable the student to become his own historian and develop his own conclusions about what happened and why.

Content

The game is organized around the attempted invasion of England by Spain in 1588 and the resulting naval battle in the English Channel. Students role play the English and Spanish admirals, plan strategies, and direct the operations of their respective fleets. A referee supervises play, interprets rules, and decides disputes for each team. Participants are psychologically prepared for the game by reading selections in the player's booklet which utilizes documents, commentaries, photos, and maps to give participants a feeling for the drama of the event and the character of the persons invloved. The booklet also delineates the comparative size and strength of the two fleets at the outset of the campaign. The game proceeds through a series of timed rounds in which the admirals alternately plan and make their moves on the map. Ships may fire on one another in each round providing their targets are within range of their guns and in a direct line of fire. Chance cards are used to inject realistic variables into the game. Under the scoring system, ships and squadrons are removed from the board according to points accumulated by each side.

Procedures

Prior to starting the game sufficient time must be allowed for players to read the participant's booklet and become familiar with procedures and "fleet rules." The class should be divided into groups of five with two students assigned to serve as the English Admiral, two as the Spanish Admiral, and one as referee within each group. Each group positions itself around one of the maps: Spanish and English on opposite sides with the referee between. The admirals decide according to the instructions how to arrange their fleets. Each side has three minutes to determine its strategy, and admirals who fail to decide in that time forfeit their moves. Since timing is important, it is best for the teacher to use a timing device and begin and end rounds for all groups at the same time. Squadrons may move once and fire once in each round, but all moves and firing must be in accordance with the instructions. When either side fires, it must spin the firepower spinner to determine whether a hit has been made. Records of scoring are kept by the referee on the game sheet, and squadrons are removed from the map according to the score. At the end of ten rounds (or at the end of a class period if preferred) the scores are tallied and the side with the most points wins.

At the start of the next class period, the teacher can enter into discussion with the class about what was learned from the game. Using the "Who Won?" folders, the players read about what actually happened in the real battle in 1588 and discuss the differences between their simulation and the battle. Discussion can also revolve around the meaning of winning or losing and the various factors that influenced the outcome.

Evaluative Comments and Suggestions

Armada can usefully illustrate and reinforce concepts about power and its uses, but the concepts are likely to be more powerfully learned if readings accompany the game. The game is not difficult to play. Procedures and scoring are rather simple, although the players' strategies may be intricate and complex. The most difficult part, especially for younger players, may come in coping with the specialized vocabulary used in the selections in the player's booklet. The readings, based largely on documents of the period, contain a number of nautical terms and other out-dated expressions that will require clarification. Success in using the game as a true learning experience is dependent upon adequate attention to pre-game and post-game activities.

References

Risinger, C. Frederick. "Education Development Center, Incorporated." *Social Studies Curriculum Materials Data Book*. Boulder, Colo.: Social Science Education Consortium, Inc., 1972.

BALDICER

Developer: Georgeann Wilcoxson
Publisher: John Knox Press
Box 1176
Richmond, Virginia 23209
Publication Date: 1970
Availability: From publisher
Grade Level: 6-12 (Adults)
Subject Area: Economics, Political Science, and Sociology
Number of Players: 20 (40)

Overview

In the game of *Baldicer*, each participant assumes the role of a "food coordinator" for a country of 150 million people. It is the job of the food coordinator to see that all the people in his country are fed. As the participants struggle with their attempts to provide people adequate food supplies, they also wrestle with apparent contradictions in contemporary food supply problems. They question how and why half of the world's inhabitants are hungry and yet modern technology can produce atomic power plants and explore outer space. The game is fairly simple and easy to play, yet is normally quite interesting to participants. Students from 6th grade through high school can use the game effectively.

Materials and Cost

Materials Package:

Cardboard box, 13" x 8½" x 2", contains the following:

Coordinator's Manual: 16 pp., 8" x 6½"

Student Manual: 4 pp., 8" x 6½"; set of 20

Additional Materials: 20 Worker Yield Inventory Slates, 100 Tally Sheets, 20 Food Machine Cards, 5 Super Machine Cards, 20 Natural/Social Forces Cards, 2 Posters

Total Package $25.00

Required or Suggested Time

At least three hours of time are required to prepare for, play, and debrief this game. The game can, however, be stopped and restarted so that one three-hour block of time is not necessary. It takes about 15 minutes to play one round of the game and the Coordinator's Manual suggests a minimum of six rounds for one game.

Intended User Characteristics

Participants do not have to do any reading unless the game directions are provided as homework assignments. However, they will have to perform a fair amount of elementary mathematical calculations. This game can be played with very little advance preparation on the part of the participants. Game directions can be given to the students to study, but the instructor may instead briefly explain the order of play and then walk the players through the first round. The game can be played in any room that has desks, tables, or other surfaces appropriate for writing.

Rationale and General Objectives

The purpose of this game is to stimulate participants to think about, analyze, and look for solutions to the world's hunger problems. The following quote from one of the game posters indicates the viewpoint of the developer: "We have the know-how to split atoms . . . to transplant hearts . . . to explore outer space . . . to produce enough food for all people—why is half of the world hungry?" The game is designed to force participants to face the economic problems of an interdependent world. Participants are to learn the effects of population explosion, unequal distribution of resources and technology, and inflation, and to experience the consequences of competition between different economic systems. It is the intent of the developer to stimulate the participants to ask such questions as, "What responsibility, if any, do technologically developed groups have for underdeveloped groups?" and "Can everyone make a decent living if they just work hard enough?"

Content

Baldicer provides each participant the opportunity to be a food coordinator for a country of 150 million people. It is the food coordinator's responsibility to feed these people, or they will die and his country will no longer exist. If the latter happens, the participant then becomes a part of the "world conscience" and, during the remainder of the game, "haunts" the rest of the countries, trying to influence their thinking and their decisions. Each country starts with a different amount of food. Some countries operate at subsistence level; others at a very high standard of living. The food coordinators engage in negotiating loans and making arrangements to improve the economic potential of their nations. As each participant plays, he feels the pressure of world opinion and realizes that the decisions he makes have an effect on all people of the world. The coordinators of the poor countries find themselves at first entirely dependent upon aid from richer countries. But as this aid enables them to become independent, they too start to compete and challenge the richer, more powerful nations.

Procedures

The game of *Baldicer* is divided into five phases. During Phase 1, each participant has 40 seconds in which to write the words, Dig, Sweat, Push, and Pull on each line of his Work Yield Inventory Sheet. The total number of lines he completes determines how many Baldicers (Balanced Diet Certificates) he receives for the round of play. (Baldicers are the measuring units for food.) As Phase 2 begins, each food coordinator draws a natural/social forces card to determine what effect chance happenings may have on his food supply. For example, a hurricane might destroy his crops or an abundant rainfall might bring a bumper crop. The participants should enter all data on their tally sheets in Phase 3, and should at this time compute their total number of food units (Baldicers). The game coordinator then furnishes such information as population growth, level of technology, rate of inflation, and cost of living. The tally sheet is detailed with directions that are easily followed. Phase 4 begins next with a ten-minute period of time for planning and group negotiations. During this time, participants may move about freely as they try to make arrangements with food coordinators in other countries to enable them to solve their food problems. At the end of this period, all Baldicers that have been loaned or borrowed are recorded on line 17 of the tally sheet and a new balance is then recorded on line 18. A negative number on line 18 means that the people of a food coordinator's country have starved and the nation then goes out of existence. In Phase 5, nations may purchase new food machines from the game director, providing the food coordinators have accumulated enough Baldicers. The game cycle of phases is now ready to begin again. At least six rounds of the game should be played before a debriefing session is started.

Evaluative Comments and Suggestions

This game is most effective when used as part of a unit of study and particularly so when used with older students. A combination of study and game activities increases the students' interest in the cognitive aspects of the game and is an effective instructional device. Keep an eye on the participants at the end of Phase 1 when writing of "Dig, Sweat, Push, and Pull" is supposed to cease. There is a real temptation to keep writing, getting that extra few words on the line, after "time" has been called. Two suggestions for the teacher: 1) make a chart to show students the comparative food wealth of each nation. This is helpful in reminding participants of their particular problems and thus facilitating the effectiveness with which they play their roles; and 2) make a transparency or some other easily viewed replication of the Tally Sheet when trying to show the participants how to compute Baldicers. Students do enjoy the game, becoming easily engrossed in their roles as food coordinators responsible for the nourishment of a nation of people.

BLACKS AND WHITES

Developer:	**Psychology Today Magazine**
Publisher:	**Psychology Today Games** **1330 Camino Del Mar** **Del Mar, California 92014**
Publication Date:	**1970**
Availability:	**From publisher**
Grade Level:	**7-12 (Adults)**
Subject Area:	**Sociology**
Number of Players:	**3-9**

Overview

Blacks and Whites was originally designed in the psychology department of the University of California at Davis by Robert Sommer and Judy Tart with the intent of facilitating middle-class white understanding of minority social immobility and contemporary discrimination practices against blacks. The simulation game was revised in 1970 with further emphasis on the concept of black people as social change agents and, according to the developer, to stress the "absurdities of living in different worlds while playing on the same board."

Materials and Cost

Materials Package:

Cardboard box, 11½" x 9" x 2", contains the following:

One game sheet which describes rules and student roles, 1 game board, play money, dice, pawns, deeds, and opportunity cards; all items are durable and easily stored in the box provided; no Coordinator's Manual, Student Manual, or evaluative instruments are provided

Total Package	$6.95
3 or more	$6.30

Required or Suggested Time

Designers suggest that the game be stopped after 90 minutes of playing time unless the participants vote to continue the play.

Intended User Characteristics

Simple arithmetic and reading skills are required for computation of currency exchange and use of chance cards. Physical space should include room enough for one table and two to four chairs. Teacher orientation requires less than 30 minutes.

Rationale and General Objectives

Because the majority of white American citizens live in relative isolation from ghetto life and minority problems, *Blacks and Whites* was designed to encourage participants to become aware of and empathetic to minority racial discrimination practices which encourage the destruction of individual self concepts and aspirations toward social efficacy.

Content

Participants assuming the roles of blacks and whites move player tokens around the board, purchasing real estate to obtain wealth. Some board sections representing cheaper property value are restricted to non-whites; this makes it difficult for non-whites to accumulate land, power, and prestige. Segregation is partially neutralized by allowing blacks to combine their limited monetary resources, welfare rights, and tax immunities. Advantageous bartering with whites, who are largely competing against each other, allows blacks to become catalysts for social change.

Procedures

Simulation roles consist of black and white real estate buyers, the treasurer who controls and distributes the money, land titles, and mortgage payment procedures, and the auctioneer who sells bankrupt property and real estate which players cannot afford. Whites are given $1,000,000.00 at the beginning of the game and can buy property anywhere; blacks are given $10,000.00 and may purchase land only in certain neighborhoods. Players are situated around a real estate board, and roll dice to determine moves and possible collection of opportunity cards. The monetary inequality is diminished during the game process by allowing blacks to unite their resources, force whites to sell them land at reduced prices, and obtain welfare relief and monetary bonuses (opportunity cards). On the other hand, whites receive no relief upon bankruptcy, pursue wealth autonomously, and face heavier tax burdens. Winning consists in securing one half of the eight neighborhoods or holding the greatest amount of assets (real estate and paper money) at the conclusion of 90 minutes. The teacher assumes no specific role other than to coordinate the game.

Evaluative Comments and Suggestions

The game element is strong; however, gaming situations often arise which are not accounted for in the rules. The 1970 modification of the simulation game allows the participants to rewrite the rules; this provides flexibility which leads to participant awareness of political operations that effectively contribute to social justice and individual equality.

CAMPAIGN

Developer:	**Instructional Simulations, Inc. (ISI)**
Publisher:	**Instructional Simulations, Inc.** **2147 University Avenue** **St. Paul, Minnesota 55114**
Publication Date:	**1970**
Availability:	**From publisher**
Grade Level:	**10-12 (Adults)**
Subject Area:	**Political Science and Sociology**
Number of Players:	**23-40**

Overview

Campaign is a sophisticated and highly realistic simulation game that deals with the American political campaign system. This game is designed to allow senior high school students and adults to participate in decision making involving the tactics and strategies necessary to produce a winning political campaign. Precinct workers, pressure groups, nominating conventions, political platforms, speech making, vote switching, and news coverage are among the elements of the political process that are simulated. The game is complex and challenging but can be an exciting and effective instructional device.

Materials and Cost

Materials Package:
- Cardboard box, 12" x 11¾" x 7", contains the following:
  - Coordinator's Manual: 18 pp., 11½" x 10½", looseleaf, plastic cover; includes instructor's directions, summary of campaign forms, campaign quest activities, student materials
  - Additional Materials: Numerous and varied forms and information for use by the participants in the Campaign Simulation

Total Package $125.00

Required or Suggested Time

The developer suggests 10 hours as a minimum time allotment for use of the game from start to finish. Experience has shown a minimum of 15 hours to be more realistic, and the game could easily be used for longer periods of time. The game may be played with students more than once; each time it is played, the players learn to employ new strategies.

Intended User Characteristics

The instructor needs to spend a number of hours in preparation before introducing the game to students. He should study approximately 20 different forms and become familiar with the processes involved with each. The student, however, only needs to become familiar with the few forms that apply to his role in the game. The individuals who assume roles of analyst and pollster should not be averse to working alone and performing a number of computations. The game should be played in an area that is large enough to provide the two political parties enough privacy to discuss their campaign strategies.

Rationale and General Objectives

Campaign has been designed because of the developer's belief that it is important to take students "behind the scenes" so that they may become more aware of the interacting forces which make American political campaigns extremely complex and difficult to predict. The game has also been developed to illustrate how getting elected to political office requires a well-organized political machine that uses a carefully designed strategy and coordinated plan of attack. Some of the objectives, stated by the developer, are to make the participants conscious of: 1) the manner in which candidates are selected and elected; 2) the various ways in which news media and pressure groups can affect the outcome of election campaigns; 3) the problems involved in selecting the best way to make use of party resources, such as investing funds in newspaper advertising or buying TV air time, allotting the candidate's time to direct voter contact, or dealing with public pressure groups; and 4) the importance of political analysts and pollsters in influencing voters' actions and campaign managers' decisions.

Content

Campaign is a two-part simulation game. The first part deals with political party nominating procedures; the second with an election campaign. During the first part, participants hold party conventions to nominate their candidates and form party platforms. The second part of the game involves the election of a state senator from a district that has four wards. Each of these wards has a different background, including voting record and type of population. Each party finds, depending upon which candidate it selects, that it has certain resources available for conducting the campaign. During the election campaign, each party engages in negotiations with seven different pressure groups, the news media, and the election analyst and pollster. Each party tries to secure as many votes as possible for the big election that occurs at the end of the game.

Procedures

Phase 1. The class is divided into five groups: democratic party, republican party, news media, public sector, and political analysts. Phase 1 begins with a pre-convention period during which everyone interacts and becomes aware of each other's views and positions. The political party members are especially concerned with trying to assess the positions of the various components of the public sector, becoming familiar with the concerns of their own wards, and arranging news coverage for the convention. The second period is the nominating convention. During this time each party nominates and selects its party candidate, selects the campaign manager, and develops party strategies for the upcoming election. In the last period, referred to as the post-convention period, each party reassigns the party delegates and convention chairmen to their new party roles and gets itself ready for the election campaign. At this time the instructor should review the procedures for the election periods. Throughout Phase 1, the public sector interest groups try to get the parties to support their concerns and their preferred party candidate. They may do this by pledging their support, opposition, resources, or contributions. The news media are engaged in arranging media coverage and news releases, as well as trying to sell their advertising services to each of the political parties by impressing them with their ability to "reach the voters." The threat of editorial action and the promise of free news coverage are two levers they may use in seeking to achieve their goals. The political analysts have little to do except prepare themselves for Phase 2, the campaign.

Phase 2. Phase 2 consists of eight periods, each of which simulates eight days of actual time. During each of these periods, the political parties try to raise funds, line up speaking engagements, allocate party workers' time to different activities, plan expenditures for promotional and advertising purposes, seek free press coverage, and determine the amount of time they should spend in each ward. The news media and public sector engage in much the same activities they did during Phase 1. All decisions made by the participants are reflected on the forms that are filled out and handed to the two analysts at the end of each election round. The analysts then use the information to make necessary calculations based on certain charts and tables (provided with the game) and determine the voting strength of each party for that period. The winning candidate is determined at the end of the eighth period.

Evaluative Comments and Suggestions

Campaign is a high-powered simulation game with tremendous instructional potential, provided the instructor is willing to do a great deal of preparation and that students are motivated to tackle the interesting but challenging activity involved in playing the game. It is useful if the teacher devises some kind of three-minute warning system for the end of each period and penalizes participants who have not completed and given game forms to the analysts on time. Otherwise, no matter how much time is allowed, many students will not complete their forms on time. It is also sometimes useful to have two students simultaneously play some of the key roles; this not only gives them more manpower to carry out their tasks, but also if one of them is absent the game can still be played. Again, although the game is complex and challenging for both students and teachers, it can be an exciting, involving educational activity that simultaneously conveys a great deal of information about the political intricacies of election campaigns.

CITY HALL

Developer: **Judith A. Gillespie**
Social Studies Development Center
Indiana University
Publisher: **Ginn and Company**
191 Spring Street
Lexington, Massacusetts 02173
Publication Date: **1972**
Availability: **From publisher**
Grade Level: **9-12 (13-14)**
Subject Area: **Political Science**
Number of Players: **14-48**

Overview

Simulating a hypothetical mayoral election campaign, players don such roles as candidates, journalists, campaign managers, civic leaders, activists for causes, and ordinary citizens. The players must consider issues, party affiliations, and character of the candidates in order to decide which candidate to support. Developments in the campaign may cause some participants to shift their allegiance to candidates they previously opposed. Supporters of each candidate develop strategies to gain the support of others, making use of bargaining, campaign rallies, the media, and opinion polls. The object for each player is to win election for his or her chosen candidate.

Materials and Cost

Materials Package:

Heavy paper envelope, 9½" x 12½", contains the following:

Coordinator's Manual: 39 pp., 8½" x 11", stapled paper cover; includes objectives, preparatory steps, instructions for playing, a list of 38 players' roles, pertinent data about the roles (such as party, race, occupation, voting record, etc.), and suggestions for debriefing

Student Manual: 4 pp., 8½" x 11", paper sheets, 3 per package; includes player objectives, background information, summary of issues, and instructions for playing and debriefing

Additional Materials: 4 duplicating masters: public opinion survey, official ballot, money, receipts

Total Package	$6.33

Required or Suggested Time

Approximately 30 minutes is recommended for preparing players before the game begins. Three class periods (approximately 50 minutes each) are normally sufficient for playing; however, this may be increased if developments in the game warrant more time. At least one additional period of debriefing should follow.

Intended User Characteristics

The average high school student should have no difficulty with the reading, and the mathematics involved is minimal. The teacher's most important role in this game lies in the preparation and debriefing stages. While the game is in play, the teacher should act only as advisor or facilitator. The room should be large enough to divide the players into at least four working groups, and the teacher should anticipate a considerable amount of movement, excitement, and noise. Since a good simulation requires that the participants play their roles well, it is recommended that the teacher assign the roles (especially principal roles) with this in mind.

Rationale and General Objectives

The game has been carefully structured to provide students with many insights into the factors that influence the outcomes of elections. Although the Coordinator's Manual provides detailed information on how to interpret election results, it is intended that the students will gain most of these insights on their own as a result of their experiences in the game. Among the factors that are built into the game are party affiliation, racial or ethnic identity, occupation, financial resources, position on issues, and the influence of the media. Since the game is meant to create a situation of total involvement by the class, every player has a specific identity and participates in some way in the electoral process. The game is well designed to encourage a high level of interaction among the players. It also encourages critical thinking as players develop strategies and analyze their results. By using a fictional case, rather than a historical situation, it is hoped that players will be freer to arrive at their own generalizations about the behavior of voters than they would if tied to a real-world case.

Content

City Hall simulates an election campaign in the fictional midwestern city of Arg. While the setting and characters are original, other aspects of the game are typical of American politics. The political parties represented are the Republican and Democrat; racial-ethnic groups include Blacks, Whites, Mexican-Americans, and Puerto Ricans; and a variety of occupational and socio-economic groups are represented Though the number of issues has been kept to a minimum, they are authentic—air pollution, open housing, and expansion of police services. All the basic processes involved in a municipal election are built into the game, including party meetings, campaign rallies, bargaining sessions, opinion polls, news broadcasts, and voting. Secret ballots are used and, as in a real election, no citizen is required to vote. After the election a public opinion poll assesses support for the mayor-elect based on his statement of policy, indicating the likelihood of effectiveness in office. In order to win the game, the mayor must succeed both in the election and in the poll.

Procedures

Prior to meeting with the class, the teacher should become thoroughly familiar with the game materials and identify the students who will play the various roles. Thirty-eight roles are provided with specific directions for increasing or decreasing the number according to class size. During the first class period, the teacher explains the simulation, assigns roles, and distributes playing materials. Party representatives map strategy, bargain, conduct campaign rallies, and prepare policy statements; and media representatives prepare newspaper items and broadcast announcements. On the third day of the activity the players cast their secret ballots and elect a mayor. The players then react to the elected mayor's policy statement in a public opinion poll.

During the debriefing exercises the players work in small groups, systematically surveying the data from the ballots and public opinion polls in order to arrive at generalizations about political behavior. The groups then reassemble as a class to hold a general discussion about political behavior.

Evaluative Comments and Suggestions

City Hall is well designed to accomplish the stated purpose of demonstrating "how citizens make voting decisions in choosing their elected officials." Care has been taken to structure the game as realistically as possible. For example, some voters have more than one vote to reflect the fact that those who have greater resources are likely to have more potential influence.

The success of *City Hall* as a simulation depends on the ability of the players to identify with their roles and play them accordingly. This may depend, in turn, upon the care with which the teacher prepares the class. The Coordinator's Manual is very specific in terms of what preparations are required and what the teacher may do as the game proceeds. With these requirements met, students should learn a great deal about political behavior by playing *City Hall.*

THE COLLEGE GAME

Developer: **Ronald Short**
Publisher: **The College Game**
1005 Banbury Drive
Spokane, Washington 99218
Publication Date: **1969**
Availability: **From publisher**
Grade Level: **10-12**
Subject Area: **Sociology and Human Relations**
Number of Players: **3-15**

Overview

The College Game was designed to acquaint students with decision-making problems that may be experienced by any student when he enters college. Players work with a profile of a fictitious student who is entering his first year of college and must allocate the student's time wisely between personal, social, and academic purposes. The game is designed to help each participant become aware of the demands that can be placed upon him when he enters college life, and is intended to enable him to make effective choices when personal conflicts arise during the first weeks of his own college life.

Materials and Cost

Materials Package:
- Heavy paper envelope, 10" x 14½", contains the following:
- Coordinator's Manual: 4 pp., 5" x 8¼", folded paper pamphlet
- Additional Materials: Players Rules; 3 Profile Sheets; 3 Schedules (Social, Academic, and Personal); 2 clear acetate sheets; 1 cleaning rag; 1 die; 3 china markers (red, green, and black)

Total Package	$15.00

Required or Suggested Time

Time needed for use of this game varies from one and one-half to three hours, depending upon the skill of the game director and the length of time used for debriefing.

Intended User Characteristics

Participants are required to use minimal computational skills and to read their student profile. The game can be played by any multiple of three players; however, it is recommended that the game director have a game assistant for approximately every 15 players. Any room with flexible seating facilities can be used.

Rationale and General Objectives

According to Ronald Short, developer of the game, a student's success in college depends a great deal on his ability to adapt easily to conflict-laden situations and to resolve problems based upon an understanding of the consequences of the decisions he makes. Short has stated that "many such decisions are made unconsciously by default as the typical student drifts into one activity after another, without consciously weighing the consequences." It is the objective of this game to have students get a feeling for the kinds of problems that they will face upon entering college, to experience decision-making conflicts, and thus to become better equipped to make effective decisions when actually faced with the realities of college in their own lives.

By the conclusion of the game and debriefing, students are also to: 1) know what constitutes a typical course load and week for a college freshman; 2) know that college courses vary in difficulty and that students have to spend more time on difficult courses; 3) recognize that some students must study more than others because academic abilities vary; 4) recognize that college life is full of internal conflict; 5) experience the consequences of daily choice-making; and 6) feel that they have some degree of control over their college careers, even though personal and chance factors do interfere.

Content

Students assume the roles of fictional freshman college students. Accordingly, they plan their first two weeks of college life. Academic, social, and personal aspects of each of the fictional students' lives are emphasized. According to the game design, there are never enough hours available within a week for the college students to satisfy their needs within each of their areas of concern—academics, social life, and personal affairs. As a result, students learn to compromise and to manage time. They simultaneously acquire some specific information about college life and problems today.

Procedures

The game begins when the students organize themselves into groups of three participants. Each player receives a profile sheet, a plastic playing board, and a cleaning cloth. The game board indicates what area of the student's life—either academic, social, or personal—that each participant is to be concerned about. After briefly studying the profile, each player indicates the hours of the day he wishes to use for his particular area of concern. He places either an A (Academic), a P (Personal), or an S (Social) on the appropriate hour blocks of his plastic playing board. Players may not allot hours that are already designated on the game board as being for classes or a job. The plastic overlays are then placed on top of the master board. After a quick look, the students can tell where individual players have chosen the same hours for different areas of activity. The three players then try to resolve their apparent conflicts. They begin with Monday and work their way through the week day by day. There are two types of conflicts which they must try to resolve: 1) conflicts caused by two or more players wanting to use the same hour, and 2) chance conflicts which are written on the master game board and take precedence over all other activities. Conflicts are resolved when two or three players in the group agree on how the hour in discussion should be used. Players may also resolve both chance and other conflicts if one of the other players voluntarily moves his demand for time to an unused hour in the same day, but only the same day. Conflicts may not be resolved by players moving backward in the same day. Scores are determined by adding the number of hours utilized during the week for each area of the simulated college student's concerns. The winner is the player that comes closest to achieving his assigned quota. The scores for academic efforts can be translated into grades according to the instructions written on the back of the academic game board.

Evaluative Comments and Suggestions

Neither the game nor the simulation components of this instructional device are very sophisticated. There is a great deal of chance involved in the determining of the outcome of the play. The players' capabilities, especially their ability to communicate with one another in resolving time conflicts, are quite significant in affecting the outcome of the game. The Coordinator's Manual suggests a very effective technique for introducing the game to groups, and also provides the director with assistance for planning a debriefing session. The game is simple and easily played. It requires no homework preparation on the part of the students and little from the teacher. The prime function of the game is in stimulating discussion and developing students' sensitivity to the potential problems and demands of college.

CONFLICT

Developer: **Gerald L. Thorpe**
The World Law Fund
Publisher: **Simile II**
1150 Silverado
La Jolla, California 92037
Publication Date: **1972**
Availability: **From publisher**
Grade Level: **10-12 (Adults)**
Subject Area: **International Relations and Political Science**
Number of Players: **18-35**

Overview

This simulation game has a futuristic setting and deals with problems of coping with the increasing political complexity of the world. A conflict erupts in the year 1998 over a violation of a ten-year-old disarmament agreement. All of the participants become involved, as representatives of various nations, in trying to settle the disagreement peacefully. This instructional simulation does not have a strong game element. It can, however, be a highly realistic and effective learning experience, particularly for senior high school students.

Materials and Cost

Coordinator's Manual: 16 pp., 8½" x 11", 3-hole looseleaf with brads; includes introduction, objectives, suggested time schedule, procedures, and questions for debriefing

Additional Materials: participant manuals for Albion, Ashanti, Budland, East Saxland, Ganland, Lopna, Vespu, Vosti, West Germany, Special Situations Council Chairman, Disarmament Council Chairman, and Boundary Council Chairman

Total Package $50.00

Required or Suggested Time

The game is designed to be played in 45- to 50-minute class periods. It will require, at the minimum, five days to complete. In addition, it will take at least one day to introduce the game and another to debrief it. You may wish to play additional sequences of the game. After the students have become familiar with the game process, each complete game cycle can probably be played in two or three days. Approximately two weeks of classroom time are normally required to make effective use of the game.

Intended User Characteristics

Minimum mathematical computations and reading are required of students in playing this game. Junior high school students can easily read the printed matter involved. The success of the game does, however, depend on the participants having a relatively serious and mature view of the world. For this reason, and due also to the fact that the game objectives are rather sophisticated, it may prove difficult to use effectively with junior high school students. The game can be played in one large classroom, but it is much more desirable to have three separate rooms; the three councils can thus meet and negotiate in privacy. The teacher does not have to have a background in international affairs to direct this simulation; however, some understanding of political science and international affairs certainly would be helpful.

Rationale and General Objectives

This simulation may be thought of as a catalytic agent, the purpose of which is to stimulate participants to think seriously about alternatives for achieving world order. It is designed to allow the participants an opportunity to experiment with a hypothetical solution to the problem of administering world peace among nations. It is not the developer's intent to present a model of what should be or even of what will be, but simply to stimulate the participants to look for a world organization model that would enable man to cope more effectively with the problems of a rapidly changing world.

Content

Conflict is based on the model for a "disarmed world" that was developed by Arthur Waskow at the Institute for Policy Studies in Washington, D.C. The game participants have to learn the mechanisms of Waskow's model to function in the game. The model is built on four basic assumptions, as follows: "1) nationalism is, and will continue to be, a potent force in the minds of men; 2) conflict and mutual distrust between nations will continue to be intense far into the future; 3) advancing technology will soon reach a point where means of mass destruction will make war so terrifying and useless as a tool of national policy that nations will find a way of controlling it; and 4) an enforced disarmament system will be designed which takes into account the potent appeal of national loyalty, mutual distrust among nations, and great difference in power among nations. A centralized authority, modeled on the American 'Separation of Powers' principle, and some form of major power veto will be prominent."

In this game setting, an international crisis emerges when one nation violates a disarmament agreement and the World Court issues "Cease and Desist" orders. The nation's violation is referred to the three world councils. These councils are to decide what actions to take against the violators. Students are involved in trying to formulate policy that will be to their own national interest and will still prevent the incident from exploding into a devastating world war. The students gain experience in simulated international negotiation both at the formal council meeting and through informal private discussions among representatives of the various nations. Students consider the possibilities of an international conflict comparable to that which they simulate happening in the future. The students are also stimulated to contemplate the contemporary need for the creation of more effective structures for dealing with world politics and problems.

Procedures

The students are divided into groups of three participants each. One group of participants represents the rebel forces of the troubled area of the world. The other groups of participants represent the nations of the world. There should be at least eight nations. It is also desirable to have different participants act as chairmen of the disarmament council, the boundary council, and the special situation council, although these chairmen can also serve as representatives of neutral nations. The three councils—disarmament, boundary, and special situation—are composed of two types of membership. Representatives from other nations are elected to serve on a single council for a period of two years. During Phase 1, each nation first becomes familiar with the findings of the world court and then prepares a brief position statement to present at the opening general meeting. After all nations have spoken at the general meeting, the representatives of each nation then meet privately to formulate plans and develop strategy. Phase 2 is a period of international discussion. Representatives move from nation to nation trying to develop understanding and formulate mutual agreements. Each nation group then meets privately again to prepare for formal council meetings. In Phase 3, the three members of each nation go to separate council meetings where they try to decide formally what actions their respective councils will take with respect to the treaty violations. After the councils have made their decisions, the participants have a short time for informal international talks. This action begins the fourth and final game phase. Each participant nation has to decide what the nation's course of action will be in response to the council actions. Each nation then fills out its Final Response Form. Results are computed and the outcome reported. If the crisis is resolved, everyone wins; if the international political system collapses completely, everyone loses. If sufficient time is available and the crisis is not resolved after the final phase of play, you may wish to play an additional round.

Evaluative Comments and Suggestions

It is helpful to introduce the participants to the final summary report form at the beginning of the game. This often helps the students direct their thinking throughout the simulation, providing a useful frame of reference for game play. It is also helpful to announce at the beginning of the game, that the first thing that will be done in the debriefing session is to have each nation group explain the actions they took in the Final Decision Form and how these actions helped them obtain their goals. Knowing this in advance often increases the students' attentiveness to the purposes of the game. Have a mixture of boys and girls in each nation group. Boys often tend to be more aggressive than the girls and it warps the patterns of action between nations if they are comprised of all boys or all girls.

CONFRONTATION

Developer:	**Creative Communications and Research**
Publisher:	**Creative Communications and Research** **460 35th Avenue** **San Francisco, California 94121**
Publication Date:	**1970**
Availability:	**From publisher**
Grade Level:	**8-12**
Subject Area:	**Contemporary Problems, Political Science, and Sociology**
Number of Players:	**4-40**

Overview

Confrontation: The Game of Students and Protestors against the Establishment is a simulation game in which students assume the roles of Students and Protestors engaged in dialogue and disagreement with representative Establishment groups. The game can be used with students of diverse interest and ability levels, but its success depends on the creativeness and thoughtfulness of the students and teachers involved. The Coordinator's Manual describes ways in which groups can be established for game play, but the substance of the game must be devised by the participants. No discussion topics for possible disagreement and confrontation are provided. By having participants engage in meaningful dialogue in a controlled learning environment, the developers hope that confrontations in "the streets" can be avoided in American society.

Materials and Cost

Materials Package:

Cardboard box, 6" x 6" x 6", contains the following:

Coordinator's Manual: 14 pp., 5½" x 5½", stapled paper cover; includes preparation and play procedures, strategy hints

Additional Materials: 11 Confrontation Team Cards, 4 Confrontation Results Charts, 16 Confrontation Cards, 18 Student/Protestor Tokens, 6 Police Tokens, 36 Resource Tokens

Total Package $4.95

Required or Suggested Time

The developers suggest 30 minutes as the minimum amount of time necessary to play one game with four teams made up of one or two players per team. With three players on a team, the developers suggest an hour to play one game. With four players on each of the four teams, they suggest an hour and a half for game play. It is possible to begin the game during one class period and finish it during subsequent class periods.

Intended User Characteristics

This game was not developed for use by any specific group. It may be used by a range of students with differing ability and interest levels from grades 8 through 12. According to the developers, "*Confrontation* can be played in almost any situation—from a party setting, to a meeting between students and community residents, to a family room, to a school classroom." Participants do, however, need to have interest in the subject matter of the game. The teacher needs no special training or expertise for use of this game.

Rationale and General Objectives

The purpose of this game is to have participants engage in meaningful dialogue about subjects of concern to them, and pursue this dialogue to the point of disagreement, in order to simulate divisive points of view existing in the United States today. It is the belief of the developers that such dialogue can create greater understanding of the issues dividing segments of American society. It is also their belief that having students experience discussion of significant issues in a controlled setting "will encourage 'confrontations' to take place in the living room, schoolroom, community meeting room, and so on, and not in the streets."

Content

It is up to the participants to determine what specific subjects will be discussed during the course of the game. The teacher might prepare a list of topics in advance, or the selection of subjects might be left to the students to decide. The content provided by the developers is a conceptual frame in which Students and Protestors engage in dialogue with representative groups from the Establishment.

Procedures

Participants are divided into four groups. One group is called the "Students and Protestors." The other three groups are members of the Establishment and are selected from the ten Establishment roles provided with the game. Establishment roles are Washington, State Government, City Hall, The Military, University Administration, Factories and Corporations, Banks and Financial Community, Merchants, Landlords, and Home Owners. The game may be played as either a discussion exercise or as a discussion exercise coupled with competitive game rules leading to a winner and loser being declared.

Each round of play is initiated by the Students and Protestors presenting a demand or series of demands to one, two, or all three of the Establishment groups. After discussion between the Students and Protestors and the Establishment groups involved, the Establishment decides whether to accept or reject the demands. If they comply with the demands and are playing competitively, they lose some of their resources. If they refuse to comply with the demands, it is up to the students to determine what action to take. If they feel an impasse has been reached, they may call for a "confrontation." In a confrontation, the Students and Protestors are to decide secretly whether they will take no action, protest, or riot. In turn, the Establishment groups are to decide whether they will take no action, call police for standby protection, or call police for riot control. Once decisions have been made, participants announce the action they have taken and check a Confrontation Results Chart to see what has occurred—what resources have been lost, damage done, etc.

Evaluative Comments and Suggestions

The success of the game depends on the skill and imagination with which the participants create and play their roles. No discussion topics are provided with the game. Aside from the experience of participating in discussion leading to possible impasse and confrontation, learning potential is limited unless students become thoughtfully engaged in subjects of interest and importance to them.

CONSUMER

Developer:	**Gerald Zaltman** **Academic Games Associates, Inc.** **Johns Hopkins University**
Publisher:	**Western Publishing Company, Inc.** **Education Division** **850 Third Avenue** **New York, New York 10022**
Publication Date:	**1969**
Availability:	**From publisher**
Grade Level:	**7-12 (Adults)**
Subject Area:	**Consumer Economics**
Number of Players:	**11-34**

Overview

Consumer is designed to involve students in the day to day decision-making problems which face American adults in the marketplace. The participants have to decide whether to use income or credit for their purchases. They learn that borrowing from loan agencies or buying on credit is more costly than deferring purchases until they can pay cash. The game can be adapted to groups of varying abilities and backgrounds. The number of players who participate and the number of rounds which are played are also flexible.

Materials and Cost

Materials Package:

- Cardboard box, 21½" x 12" x 2½", contains the following:
- Coordinator's Manual: 8½" x 11", stapled paper cover; includes overview, playing directions, role descriptions, suggestions for debriefing, bibliography
- Additional Materials: 5 durable profile folders; paper money; 1 pad consumer record sheets with consumer rules; 1 pad of each of the following: banker's record sheet and score card, finance company record sheet and score card, Last National Bank note; Downtown Department Store payment contract; Fort Knox Finance Company note; 1 pad special sales slips; 50 chance cards; 6 colored pencils; 1 stamp book; 12 each of 11 different product cards; 12 display boards

Total Package	$30.00

Required or Suggested Time

The game was designed to be completed in approximately one and one-half hours if from 15 to 17 players are involved. Additional players lengthen playing time. The authors suggest that the game be completed in one session. In order to insure that the game is completed in one session, the playing time can be shortened by playing half the number of rounds and doubling the cash allowance each round. Playing time can also be shortened by assigning participants their roles (with profile folders) in advance so that they can become familiar with their roles outside of class time.

Intended User Characteristics

Consumer requires a 7th-grade reading level and elementary mathematical calculation ability. The game can be played with little advance preparation; students should read their profile folders and the instructor should briefly explain the order of play. The roles of the credit agents, the salesman, and the coordinator involve record keeping which is more complex than the record keeping which is required of the consumer. A degree of aggressiveness is needed in the credit agents, since their role is highly competitive. The coordinator is required to exercise impartial judgment in settling disputes. Initially, the instructor may want to assume the coordinator's role or to assist the player who does assume the role of coordinator. No previous training in economics is required of the instructor. Five tables or desks are needed for the credit agents, the salesman, and the coordinator. The game should be played in a room which is large enough to allow the participants some mobility.

Rationale and General Objectives

The developers of *Consumer* believe that "a major goal of society is the education of adults trained and motivated to act maturely and responsibly." The game is designed to help high school students achieve this goal in their role as consumers. It is designed to help the students face the many dilemmas which occur in the marketplace, such as choices between necessities and luxuries or between credit buying and saving for a purchase.

According to the authors, players will learn to: 1) compare the interest rates charged by different financial institutions; 2) appreciate the mechanics of credit and the importance of a good credit rating; 3) understand fully the provisions of a contract before signing; 4) guard against unanticipated events over which they have no control; and 5) consider the opportunity costs of their purchases.

Content

Consumer provides a simulated marketplace in which goods are offered for sale and credit may be obtained. Participants assume roles of consumers, credit agents, or a salesman. Consumers are given money to buy products which have varying point values. They must decide when to buy certain items and whether to go into debt to obtain a particular product. Students will learn about credit, interest rates, product value, contracts, collateral, and repossession. They will understand how to budget income and how installment buying works. Students will make affective gains in appreciation of communication skills, evaluation of choices, and understanding of the value of deferred gratification.

Procedures

Ten to 12 students assume the role of consumers, three assume the role of credit agents, and one assumes the role of salesman. The instructor or an advanced student should assume the role of coordinator. Consumers may be paired and play as teams to expand the number of students who are involved or consumers may be eliminated to accommodate fewer players.

The game is played in eight rounds; each round represents one month. Consumers receive a monthly income which they allocate for purchases. Points are gained for each purchase. Points can be increased by borrowing from loan agencies or buying on credit; however, participants must pay interest charges which are deducted from their score. Each participant's goal is to acquire as many points as possible while keeping interest charges to a minimum. Each month consumers draw chance cards which are designed to simulate the real life probability of unforeseen expense, such as accidents and illnesses and opportunities such as special sales.

The credit agents compete against one another to attract loan customers; credit agents receive points for each transaction. The agents can ask for collateral and can refuse loans to poor credit risks.

The salesman sells products, receives money, and records points. He can also auction a consumer's goods to raise cash and can help credit agents sell repossessed items.

The coordinator directs the game by distributing monthly incomes, verifying credit standings, and acting as a judge in disputes between consumers and credit agents.

Play is finished when all players have completed eight rounds.

Evaluative Comments and Suggestions

Consumer is based on a narrow model of consumer economics and reflects a middle class value system, particularly with respect to purchase making. The game can best be used with other economics materials or in a consumer economics or home economics class.

The game may drag if lines get long at the business stations which consumers frequent. Having more than one person acting as a credit agent sometimes alleviates this problem.

Although this game is not difficult, there is much for participants to remember in order for the game to function properly. The instructor particularly must be familiar with all the different roles and their implications for the participants during the simulation.

CRISIS

Developer: Western Behavioral Sciences Institute (WBSI)
Publisher: Simile II
1150 Silverado Street
LaJolla, California 92037
Publication Date: 1966
Availability: From publisher
Grade Level: 7-12 (Adults)
Subject Area: International Relations
Number of Players: 18-25

Overview

Crisis was designed by Western Behavioral Sciences Institute as a simplified version of *Inter-Nation Simulation*, a game developed by Harold Guetzkow and Cleo Cherryholmes but at a more sophisticated level. The purpose of *Crisis* is to encourage junior high school students to appreciate the complexity of international relations. In *Crisis*, six imaginary nations comprised of teams of three to six participants face the problem of resolving an explosive international incident in a mining area of great economic significance to the globe. The goals for all countries are to secure partial control of the mine's resources while maintaining internal political stability and world peace.

Materials and Cost

Coordinator's Manual: 14 pp., 5½" x 6", stapled paper cover; includes rationale, instructions for playing the game, discussion questions for debriefing

Student Manual: 8 pp., 5½" x 8½", stapled paper cover

Additional Materials: World History Sheets, Decisions and Consequences Forms, World Organization Decision Forms

Classroom set of 25 including Coordinator's Manual	$35.00
Classroom set of 35 including Coordinator's Manual	$50.00
Sample set including Coordinator's Manual	$ 3.00
Extra Sets of Consumable Forms	$ 2.50

Required or Suggested Time

The game can be played effectively in three to four hours. Actual round time is approximately 30 minutes.

Intended User Characteristics

Participant involvement requires little reading or mathematical computation. Although the game can be played in a large classroom, arrangements should be made such that nation teams cannot overhear each other; the analysts, messengers, and teacher should be sufficiently removed to allow confidential team discussions. The teacher does not need an extensive background in international relations in order to effectively coordinate the game.

Rationale and General Objectives

The authors believe that students will acquire a greater sensitivity to the complexities of international problems by participating in a simulation game based on conflict between nations. Students are to solve problems without upsetting the international political balance. In the process of the game they are to analyze the resource needs and political strengths of nations, to make decisions, to accept the consequences of their decisions, and to develop effective communication skills.

Content

Crisis simulates international crisis as six nations struggle for control over a mining area of strategic international importance. Assuming roles as administrators of six nations which vary in political strength and military capacity, the participants can use military force, written communication, or debate in the World Organization to achieve their goals. The primary goals for all nations are to secure Dermantium (the element in the mines) for their citizens, to prevent destruction of their nations, and to secure world peace. Fact-finding commissions, international police forces, summit conferences, and global alliances may be arranged depending on what the students wish to accomplish as their immediate and long-term goals.

Procedures

Each participant assumes the role of a nation-state executive. Each round begins when nation teams fill out decision forms and decide what strategies will be employed in the World Organization (WO) meeting that follows. At the WO, a chairman is selected, players speak one at a time, and decisions are recorded on forms. After the WO, players restructure their desks into nation groups, fill out "consequences" forms, and decide what they will propose for the next round. Rounds follow the same pattern of deadlines and schedules, each representing six months of real time. Messengers gather proposals from the nations, giving them to the analysts who compute the information in terms of military strength. This information is disseminated to the nations which continue to negotiate based on the new information. The teacher plays no active role other than changing the procedural rules. Winning consists not in gathering points but in acquiring Dermantium and securing world peace.

Evaluative Comments and Suggestions

The model is open-ended, allowing the participants to employ almost any action they perceive as desirable for achieving final successful acquisition of Dermantium. *Crisis*, which clearly represents Cold War political developments, facilitates further student exploration and appreciation of present day problems of resource allocation in Southeast Asia, the Middle East, and similar underdeveloped areas of the world.

CULTURE CONTACT

Developer: **Abt Associates, Inc.**
Address: **Abt Associates, Inc.**
55 Wheeler Street
Cambridge, Massachusetts 02138
Publication Date: **1969**
Availability: **From publisher**
Grade Level: **6-12**
Subject Area: **Anthropology, Sociology**
Number of Players: **20-30**

Overview

Culture Contact, developed by Abt Associates, Inc., simulates the potential conflicts and misunderstandings between two peoples of widely different cultures. Students assume various roles within one of the two cultures and then interact with one another and with the group. Students will see the importance of communications and interaction between cultures.

Materials and Cost

Coordinator's Manual: 12 pp., 8½" x 11", stapled paper cover; includes directions and rules for playing, scoring procedures, post-game discussion suggestions, and background of two cultures

Student Materials: 30 manuals, 8 pp. each, 8½" x 11", loose sheets; include role description, diagram of social structure of the cultures, general background on the culture

Additional Materials: three 8½" x 11" training cards; one 8½" x 11" deed; one 8½" x 11" lease; eight 8½" x 11" maps

The following items are printed on 8½" x 11" colored construction paper and must be cut to the proper size on perforated lines: 24 trees, 10 barrels of water, 10 barrels of food, 100 necklaces, and 20 axes

Total Package $30.00

Required or Suggested Time

Culture Contact was designed to be played in two to five 50-minute class periods. There are four team planning sessions, ten minutes in length, and three talking sessions which take ten minutes each. The game loses its effectiveness if played a second or third time.

Intended User Characteristics

Students need only enough reading ability to understand their roles and simple addition skills. Six students must assume roles as interpreters and need to be somewhat aggressive to fill these roles. No advanced teacher preparation in content or in playing the game is necessary. The two "cultures" should be kept separated and should not be permitted to communicate during the planning periods. This separation requires a large room or some effective means of keeping the groups at a distance from each other.

Rationale and General Objectives

The game is designed to give students insight into cross-cultural behavior patterns, breakdown of communications between cultures, and problems that develop when there are language barriers between people. Students will learn that the general nature of a culture determines behavior for individuals within that culture.

Content

Students will deal with patterns of behavior as evidenced by cultural roles. They will also experience intercultural barriers such as language, governing structure, and values. Two societies, one an agrarian, peace-loving, island society isolated from the world, and the other an organized trading society, come into contact. These two societies must work at establishing some type of interrelationships while maintaining their separate cultures.

Procedures

Each student's objective, as he assumes a role, is to achieve his goals either as a member of the Grannister or the Elenian culture. In order for each society to achieve its goals, it must maintain its present way of life as much as possible. Three members of each team act as interpreters. All other players must communicate with the other culture through the interpreters. The trading of items such as maps, trees, food, and water, all of which have various values, provides means for the two cultures to interact. A team planning session is followed by a bargaining session which is conducted by the interpreters. Results of the bargaining session are used in the next planning sessions. In the fourth and final planning session, each group discusses what it has given up and what it has gained. After describing the game, assigning roles, and briefing the students on the procedures and their roles, the instructor has no part again until the debriefing of the game. A list of discussion suggestions is provided in the Coordinator's Manual for use by the instructor. These questions emphasize cultural differences, intercultural relationships, and communication problems rather than specific explanations of what occurred in the playing of the game.

Evaluative Comments and Suggestions

The game has 30 possible roles. If there are fewer players than 30, some roles can be eliminated. *Culture Contact* is one of the few simulations which deals with intercultural problems.

CZAR POWER

Developer: **Instructional Simulations, Inc.**
Publisher: **Instructional Simulations, Inc.**
2147 University Avenue
St. Paul, Minnesota 55114
Publication Date: **1971**
Availability: **From publisher**
Grade Level: **9-14**
Subject Area: **History, Political Science, and Sociology**
Number of Players: **20-30**

Overview

Czar Power simulates the political forces at work during the reign of Czar Alexander II of Russia in the mid-19th century. Individual roles with appropriate biographical information are assigned to each participant. Five social classes are represented including nobility, clergy, civil service and military, merchants and craftsmen, and serfs and peasants. In a series of timed problem-solving sessions the participants play out their roles as both individuals and groups in efforts to influence the Czar, who finally decides what course of action to take on each problem. Participants compute their gains or losses based on their own choice from among the allowed alternative actions.

Materials and Cost

Materials Package:

Cardboard box, 11½" x 9" x 2½", contains the following:

Coordinator's Manual: 18 pp., 8½" x 11", stapled paper cover; includes rationale, objectives, applications, and complete instructions for procedures and scoring

Additional Materials: 30 identity statements, 1 problem synopsis, 5 problem alternative statements, 14 problem information sheets, 26 petition forms, 32 individual scoring forms, and 14 problem benefit cards

Total Package $22.50

Required or Suggested Time

The total recommended time for *Czar Power* is 13 hours. However, this presumes four hours of "enabling" or preparatory activities. Playing time can be reduced by electing to work through fewer of the problems provided.

Intended User Characteristics

The game will be most comprehensible to students if it has been preceded by a preparatory unit on Russia in the 19th century. Otherwise students are likely to have misconceptions about their roles and many of the developments in the game. In addition, the identity statement for each player lists "Quest Tasks," such as familiarization with some basic vocabulary and terms which should be completed before getting into play. It is recommended that a map of Russia and Eastern Europe be displayed and at least one basic reference on Russian history be provided in the room (suggested titles are in the Coordinator's Manual). The room should provide space for the players to group according to social class and affiliations, and there should be room to move about while the game is in progress. Since Czarist Russia was a masculine-dominated society, female participants must adjust to playing masculine roles except that a female may play the role of Czarina instead of Czar. Scoring procedures are rather complex, and students must be able to perform a series of arithmetical operations on both positive and negative numbers. Although not specified in the Coordinator's Manual, a check-up system on scoring would be advisable.

Rationale and General Objectives

Czar Power was designed by ISI as one of a number of "active case studies" in its *Concepts of Modern Man* series. In this case the concept is autocracy. The use of Czarist Russia as the model is intended to provide the players with insights, not only into the nature of Russian autocratic rule in the 19th century, but also into the nature of power in any hierarchical structure.

It is intended that the players will come to recognize the forces which tend to build and perpetuate hierarchies of power, including such things as tradition, the vested interests of higher socio-economic classes, and the relative impotence of lower socio-economic groups. Each participant must seek to further his own interests as well as those of his social class, and he must do this within the limits that the system provides. Thus the playing of the game is expected to increase the player's awareness of the role of vested interest groups, the relationship of a group's influence to the resources at its command, and the risks entailed in trying to buck the system.

The game provides a way of learning by experience how the Russian autocracy specifically, and autocracy in general, operates. But it also provides a way of considering alternatives and speculating on how different courses of action might have led to other, and perhaps more satisfactory, outcomes.

Content

From 20 to 30 people, playing individual roles and representing five social classes under the Czar, try to influence his decisions on a series of problems. The Czar decides the priority in which the problems will be attacked. While the ultimate approach to dealing with any problem is up to the Czar, he may be affected by the advice of such people as his individual ministers, the Holy Synod of the Church, and his State Council. There are 14 problems to choose from, and a full playing of the game involves working through 12 of them. The problems are Social Position of Serfs and Peasants, Distribution of Land and Land Reform, Political Movements and Rebellion, Religious Tolerance, State License to Create Monopolies on Trade and Commerce, the Polish Question, Taxation and Tax Reform, Appointment of a New Moscow Metropolitan, Russian Interests in the Black Sea, Expansion to the East, Military Needs and Defense, Educational Reform, Secret Police and Censorship, and Government Reorganization.

Procedures

Prior to getting involved in play, a considerable amount of preparatory activity is necessary, such as familiarizing students with the historical period of the game. When these have been completed, the Czar is handed the Problem Synopsis, from which he chooses four problems to deal with in the first period of play. All participants, including the Czar, must choose from among specific alternatives which are open to them in solving each problem. Gains or losses for each individual are tabulated through a fairly elaborate scoring system, which provides for changes in wealth, status, and quality of life. It also provides for punishments, including fines, imprisonment, and banishment. Allowances are made in the game for the overthrow of the Czar by *coup d' etat* or popular revolt, but only under clearly specified conditions. Following the game, players discuss the plausibility and rationales of the alternatives in the game and speculate on the outcome had other alternatives been followed.

Evaluative Comments and Suggestions

Czar Power is a very realistic simulation. The problems dealt with in the game, the process by which the problems are considered, and the role identifications and restrictions are all in accord with the realities of Czarist Russia. The element of chance is omitted; but there is a competitive element, for players may recognize themselves as "winners" or "losers" in terms of varying degrees of satisfaction or dissatisfaction. Feedback from the classroom indicates that two good descriptors for *Czar Power* are "complex" and "authentic."

DANGEROUS PARALLEL

Developer:	**Roger G. Mastrude** **Foreign Policy Association**
Publisher:	**Scott Foresman and Company** **1900 East Lake Avenue** **Glenview, Illinois 60025**
Publication Date:	**1969**
Availability:	**From publisher**
Grade Level:	**8-12 (Adults)**
Subject Area:	**International Relations and Political Science**
Number of Players:	**18-36**

Overview

Originally conceived by Roger Mastrude of the Foreign Policy Association and designed by Abt Associates, *Dangerous Parallel* introduces students to "a realistic laboratory experience of international decision making and its consequences." Six imaginary nations must resolve a conflict between two bordering small nations or face world war. Working within the profiles of their nations, participants assume the roles of top cabinet leaders who must allocate their resources to achieve national goals in international conflict while at the same time trying to avoid war. Participants will not only gain insight into the nature of high governmental leadership positions but will also have an opportunity to practice analysis of goals and develop communication skills.

Materials and Cost

Materials Package:

Cardboard box, 9¾" x 10" x 13½", contains the following:

Coordinator's Manual: 160 pp., 8½" x 11", stapled paper cover; includes rules for game, rationale and objectives, filmstrip and record script, discussion questions, and copy of student manuals

Student Manual: 24 pp., 8½" x 11", stapled paper cover; 36 separate manuals, different in some respects to reflect different cabinet positions and national profiles

Additional Materials: 36 Information File books, 6 Top Secret Resource Envelopes, 36 Minotaur badges, 6 Decision Choice wheels, 6 Identification Easels, 12 Decision Maker's Checksheet pads, 6 Decision Report forms, 1 Consequences Calculator, 1 filmstrip, 1 record to accompany filmstrip

Total Package $60.00

Required or Suggested Time

The actual simulation will require five or six days of classroom time, involving approximately 40 minutes each day. Only one round should be played each day, thus leaving extra time between rounds for "deliberation, analysis, and preparation." The developers also suggest that the simulation begin on a Friday to give participants the weekend to become familiar with the Crisis Manuals. Discussion and post-game follow-up activities will require additional classroom time.

Intended User Characteristics

A 7th-grade reading level and simple arithmetic skills are required for assessing battle casualties and costs and for writing up national decision reports. No previous knowledge of subject matter is required. In fact, having no previous historical background may prevent students from making superficial historical parallels with the Korean War and attempting to act out historical events with limited information. The teacher will act as the "control," becoming the time keeper, observer, and collector of money and troop units. A record player, overhead projector, and filmstrip projector will be required. A classroom that will allow for considerable student movement and discussion, as well as placement of chairs into six groups that will allow for some privacy, is required.

Rationale and General Objectives

The developers state that, "this simulation offers students an opportunity to carry out many of the functions of a nation's top-level decision-makers." As world leaders, students are required to explore the importance of national priorities, understand the relationships between long range goals and everyday decisions, and estimate how and why consequences follow from decisions. After playing *Dangerous Parallel*, participants will hopefully understand some "significant ideas about decision-making and the nature of international negotiation."

Content

Dangerous Parallel simulates international crises as six nations of differing size, technological development, ideology, and military strength attempt to resolve military aggression between two small nations. Acting the roles of high cabinet ministers, participants must determine in succeeding rounds whether or not to pursue national objectives militarily that would risk global war, or seek to achieve their goals through peaceful negotiation. International councils, troop deployment, alliances, diplomacy, and subterfuge are possible options participants can use to increase national strength or prevent others from gaining international predominance.

Procedures

After a filmstrip and a recording exercise which present the historical events that led to the outbreak of war, participants assume the roles of chief minister, political minister, defense minister, and ambassador at large for each of the six nations. (If classes are smaller, less important roles within each nation may be excluded.) Students group themselves according to their respective nations and become familiar with their nation's profile, individual government roles, and the current state of world affairs. In round two, cabinet members meet with chief ministers to determine national goals and estimate other nations' goals. Rounds three through six follow the same basic format: 1) cabinet ministers confer and submit their departmental analyses of the current situation to the Chief Minister, who makes a consensus decision on national action and gives ambassadors their instructions; 2) ambassadors negotiate and pass information back to the Chief Minister; 3) Chief Minister again meets with Cabinet to make a Final Decision Choice which is submitted to Control (teacher); 4) the Control computes consequences of each of the six nations' choices; 5) this computation describes a New World situation (e.g., war, military escalation, call for a new international conference). Cabinet members and chief ministers meet again to react to the new world situation, which is the start of the next round. The game ends when either a peace settlement or all-out war has occurred. The winner is the team who has suffered least economic and military loss while coming nearest to accomplishing national goals. If global war occurs, everyone loses.

Evaluative Comments and Suggestions

Although a long, involved game, *Dangerous Parallel* is highly motivating, especially for those students who do not normally express themselves verbally in regular classroom discussions. Especially capable students, however, sometimes feel restricted during decision making in the final round. This feeling of restriction can be overcome by a teacher who is flexible with the rules and quick to offer alternatives in game play. Students who play roles as members of underdeveloped and neutral countries must quickly realize that their roles are as peacemakers instead of world leaders, which is also sometimes frustrating. Students normally become involved in the purposes of the game, and don't treat the game activities as a simple exercise in warfare. After game play has concluded, students also seem to be less willing to look for quick, easy solutions to international disputes and understand more readily the potential ambiguities of international relations and the feasibility of diplomatic stalemates.

DEMOCRACY

Developer: James S. Coleman
Academic Games Associates, Inc.
Johns Hopkins University
Publisher: Western Publishing Company, Inc.
Education Division
850 Third Avenue
New York, New York 10022
Publication Date: 1966, 1969
Availability: From publisher
Grade Level: 7-9 (10-12)
Subject Area: Political Science
Number of Players: 6-11

Overview

Democracy is a set of eight games which develop from simple to complex; the set represents various stages of decision making in the democratic process. Participants play the roles of legislators in Game 1 and citizens in Game 2. Game 3 links the roles of legislators and citizens and shows the relationship between these roles in a representative democracy. The advanced games are variations of Game 1 and teach more complex principles of political decision making.

Materials and Cost

Materials Package:

- Cardboard box, 11¼" x 8¾" x 1", contains the following:
- Coordinator's Manual: 12 pp., 8½" x 11", stapled paper cover; includes rationale, directions for playing, advanced versions of the game, suggested follow-up activities, and bibliography
- Student Manual: 7 pp., 8½" x 11", stapled paper cover; includes rules for Games 1, 2, and 3; advanced games not included (5 manuals are included)
- Additional Materials: 8" x 12" perforated cardboard sheets to be separated into 3" x 2" cards as follows: 52 Constituency cards, 20 Age, Sex, and Marital Status cards, 66 Regional cards (11 cards for each of 6 regions), 8 Issue cards; 1 pad of Legislator's Work Sheets, 1 pad of Citizen's Work Sheets, 1 Chairman's Check List

Total Package $8.00

Required or Suggested Time

Games 1, 2, and 3 can be played in 50-minute class periods if students have been briefed the previous day. The more advanced games may require two or more 50-minute periods. Additional time is required for debriefing and follow-up activities.

Intended User Characteristics

A 7th-grade reading level and simple addition and subtraction skills are required. No previous knowledge of subject matter is required by the participants or the instructor. Participants should be grouped around a large table, although individual chairs grouped in a circle can be used.

Rationale and General Objectives

Democracy has been designed to illustrate the decision-making process in a representative democracy. Students will see not only how decisions are made, but also how individual citizens influence the democratic process. By assuming roles as legislators in Game 1, participants will understand the duties and responsibilities of legislators and the dependence of legislators on the desires of their constituents.

In Game 2, participants will assume roles as citizens and, through the processes of voting and negotiation, learn the importance of informal influence.

Game 3 combines a citizens' meeting with a legislative session to show relationships between the final decisions reached and the desires of individual citizens.

Objectives for Games 4 through 8 involve understanding more complex processes which are involved in political decision making.

Content

In Game 1, a legislative session takes place in which each player attempts to get bills passed or defeated. The player's actions as a legislator are dependent on the wishes of his constituents. Each participant tries to satisfy his electorate in order to be re-elected.

Participants assume the role of citizens in Game 2. Each citizen has a specific social and economic background. Players attempt to influence others to vote for legislation on issues which are beneficial to them.

Game 3 is a combination of Games 1 and 2. A citizens' meeting is held and participants decide on issues to support. A legislative session follows and legislators must try to satisfy the desires of citizens by approving support of these issues.

The five more complex games are variations of Game 1. They involve by topic: A Legislator's Own Convictions, The Power of the Floor Leader, Passage of a Legislative Program, Committee Structure in the Legislature, and Taxation and Public Expenditure.

Process skills with respect to decision making and negotiation are involved in playing these games. Students will learn to value the roles of influence and pressure in a representative democracy.

Procedures

Procedures for playing *Democracy* vary somewhat with each game. Only procedures for the three basic games are described here; Games 4 through 8 are the same as Game 1 with additional rules and variations in strategy for each.

In Game 1 each player assumes the role of a legislator. One player is elected or appointed as chairman. Each legislator receives constituency interest cards indicating how his constituents feel about issues. Legislators make speeches, plan, bargain, and vote on issues. Time is then allotted for further negotiation and a final roll call vote is taken. Positive scores are given for voting which satisfies a legislator's constituents and negative scores are given for votes cast against the desires of constituents. There are eight issues and the game is complete when votes have been cast concerning all of them.

Participants assume roles as citizens in Game 2. Each player has an individual age, sex, marital status, occupation, income, and race which is assigned at random. One player is elected or appointed as chairman and negotiates and votes just as the other players do in addition to conducting the citizens' meeting. A citizens' action meeting is conducted in one of six regions of the United States. The purpose of the meeting is to negotiate and vote on six issues. Participants make statements about who they are and what their position is on issues. They plan, bargain, vote, negotiate, and then take a roll call vote. Scoring on each issue is positive if the outcome satisfies a player's interest and negative if it does not.

In Game 3, players are divided into groups. All six regions meet at once and hold a citizens' meeting as described in Game 2. Players use their scores as input for the constituency interest scores to be used in the legislative sessions. Players are regrouped to form six different legislatures and play proceeds as in Game 1. Winning is based on the highest combined score from the two games.

After the games have been introduced, the role of the instructor is to organize groups and answer any questions which may arise. He does not participate in the simulations.

Evaluative Comments and Suggestions

These games are good for both teachers and students who have not had previous experience with simulation; this is primarily because they proceed from an easily mastered, simple format in Game 1 to progressively more complex formats in the games which follow.

DIG

Developer: **Jerry Lipetzky**
Publisher: **Interact Company**
Box 262
Lakeside, California 92040
Publication Date: **1969**
Availability: **From publisher**
Grade Level: **9-12 (6-8) (Adults)**
Subject Area: **Anthropology**
Number of Players: **14-36**

Overview

Dig was developed by Jerry Lipetzky, a high school teacher with David Yount and Paul Dekock of the Interact Company, at El Capitan High School in Lakeside, California. *Dig* has been designed to be the basis of a four-week instructional activity incorporating gaming and simulation components with study of anthropological concepts and archeological field experience. Although designed for use with high school students, the game can be used with a wide range of student age groups. Teachers need no background in anthropology; however, some background, specifically archeology, would be helpful.

Materials and Cost

Materials Package:

One 8½" x 11" booklet with removable plastic binding; booklet is designed as a guide for the teacher to use in producing the game materials; each page may be removed individually and duplicated for classroom use; booklet contains the following:

Coordinator's Manual: 33 pp., includes rationale; annotated bibliography; overview; four-week time schedule of game activities; specific instructions; copies of all sheets used in game, including 3 Assignment Sheets; Artifact Blueprint Sheets; Before and After Museum Cards; Museum Artifact Reconstruction Form; Culture Universal Analysis Sheet; CAPS Balance Sheet; Culture Universal Sheet; example of a topographic site map; Archeological Site Survey Record Sheet; Artifact Record Sheet; Archeological Feature Record Sheet; Archeological Stratigraphy Record; Archeological Photo Record; and a Team Guide for the Big Dig

Student Manual: 1 p., includes explanation of tasks for the game

Total Package (One Booklet)	$10.00

Required or Suggested Time

The developer provides a suggested time schedule for use of this simulation game. Although it can be altered at the discretion of the teacher and students, the schedule calls for use of four weeks of classroom time, based on classroom periods of approximately 45 minutes each.

Intended User Characteristics

Although originally designed for use with high school students in anthropology or history classes, the game can be used with a wide age range of students. The Coordinator's Manual specifically states that teachers need no background in anthropology to use this game successfully; however, some anthropological training would be helpful.

Rationale and General Objectives

This simulation game is actually the basis for a four-week unit of instruction and has been designed to integrate game theory as an effective facilitator of meaningful student learning with study of basic anthropological concepts. The developer provides an explanation of his intent and objectives in the Coordinator's Manual, as follows: "In *Dig* your classroom will become an archeological lab, filled with the type of heated discussions and questioning interpretations that characterize the discipline of archeology. Unusual and exotic artifacts will be excavated . . . using the scientific techniques employed by professional archeologists. They (students) will record their observations and measurements on the same forms used by many museums and universities.

After the artifacts have been restored and analyzed, the 'ancient civilization' responsible for the remains will 'return' and allow the archeologists to discover the accuracy of their findings and interpretations." In addition to simulated experiences as archeologists, it is the intent of the developer that students will learn basic anthropological concepts as well as respect for creativity and craftsmanship and will acquire skills in scientific expression.

Content

The following are listed in the Coordinator's Manual as being included among those concepts that students will acquire in their experience with *Dig*: "1) All people, past and present, have shaped their beliefs and behavior in the face of universal human problems and needs; 2) the various elements of any culture are interrelated and cannot be understood without examining the culture as a whole; 3) the culture of any society is constantly being altered, and a change in one element will affect changes in other elements; 4) it is difficult to examine and interpret cultures different from your own; 5) art reflects the ideas and moods of a culture; and 6) individual effort and group success are closely related." According to the developer, students are also to acquire these attitudes and skills: "1) respect and admiration for creative and skillful craftsmanship; 2) respect and admiration for the individual capable of creative thinking; 3) techniques of field archeology; and 4) development and release of creativity."

Procedures

The game is divided into four phases. In Phase I, students divide into two teams. Each team creates its own culture, identifying such characteristics of the culture as governmental form, economic system, and religious beliefs. During Phase II, the members of each team create artifacts that are appropriate to their cultures. The artifacts must be blueprinted and justified as to why they are appropriate products of their culture. During this phase, the students also are instructed in the proper formal procedures for archeological excavation. Crew chief, diggers, measurers, and other dig crew tasks are assigned. Phase III is devoted to the actual dig. Students use archeological techniques and reporting forms to uncover the artifacts of the civilization left by the other team of students. Although the Manual explains in detail how the dig can be conducted on large-size plots of land near the students' school, it also includes suggestions for modifications of the exercise if no area or means for outside "excavation" are possible. Phase IV is for the final report and wrap-up activities. Each team records and interprets its findings. Both teams then explain their findings to each other, and suffer the pleasure and humility of immediate verification or repudiation of their results. The final activity of the simulation is the student evaluation of the project. A suggested questionnaire for the final evaluation is included in the Coordinator's Manual.

Evaluative Comments and Suggestions

Dig is one of the very few games available for use in anthropology, specifically archeology, instruction at the high school level. It is a well-organized and detailed instructional activity that can be both exhilarating and instructive. Both students and teacher have to be willing to become involved in the imaginative creation of the civilizations that are "discovered" and certainly should not be averse to dirtying their hands in the actual field work involved in the archeological excavation.

DISCOVERY

Developer:	**John Wesley**
Publisher:	**Interact Company** **Box 262** **Lakeside, California 92040**
Publication Date:	**1971**
Availability:	**From publisher**
Grade Level:	**5 (4-6)**
Subject Area:	**American History, Geography, and Sociology**
Number of Players:	**10-35**

Overview

Discovery, an upper elementary level simulation, was designed to last approximately 23 hours or about one hour a day for four and one-half weeks. Several of the phases can be shortened or eliminated without affecting the simulation, however. *Discovery* is focused on early American colonization. The developers state that the simulation "takes the student beyond the traditional texbook approach to exploration and colonization and acquaints him with some of the realities these people had to face." Students are expected to learn about the significance of geography, natural resources, land use, and societal relationships as they move through the various phases of the simulation.

Materials and Cost

Materials Package:

One 8½" x 11" booklet with removable plastic binding; booklet is designed as a guide for the teacher to use in producing the game materials; each page may be removed individually and duplicated for classroom use; booklet contains the following:

Coordinator's Manual: 30 pp., includes purpose of the simulation; objectives; overview; set-up directions; unit time chart; daily lesson plans; background reading; Indian Interaction Chart; teacher map showing geographical location of the Acorns, Irocks, and Seques; general attitude survey; opening quiz; general rules; group offices (division of labor among group members); student map; Before You Sail Sheet; list of unit weight for ships; sea log; population record; chart of daily labor; Supplies Cards; Action Cards detailing chance events

Student Manual: 1 pp., contains information about *Discovery* and tasks to perform during simulation; 35 per package

Total Package (One Booklet) $10.00

Required or Suggested Time

Although designed as a four and one-half week teaching unit, the developers state that various portions of the simulation can be shortened, eliminated, or assigned as homework. The specific purpose or objective for each day of play is stated in the daily lesson plans. It would, therefore, be possible for a teacher to choose certain activities to meet more limited objectives than those outlined for the entire simulation.

Intended User Characteristics

Discovery is appropriate for use by 5th and 6th grade students. The structure and content of the game could be grasped by 4th graders, although the reading level is probably too difficult without extensive adaptation by the teacher. Some arithmetic skills are required to determine shipping units to which each playing group is entitled, cost of food, monies owed to the government or private enterprise, and so forth. Several hours of teacher time are required to prepare and reproduce the materials.

Rationale and General Objectives

In all its simulations Interact strives to include traditional subject matter; get students involved by employing a "fiercely competitive" scoring situation; and provide a simulation which, although explicitly detailed, can be modified for specific needs. After the simulation experience students are expected to understand: "1) why people explore and establish colonies; 2) what geography means to colonizers; 3) how the availability of natural resources affects the success or failure of a colony; 4) how nature affects attempts at colonization; 5) what materials are needed to begin a colony; 6) where the best potential locations for colonies can be found; 7) what types of hardships and hazards colonists face; 8) what groups of colonists have to do daily in order to survive; and 9) what flags are and why we have them." Students are expected to develop skill at map reading and making, be able to apply their new knowledge, and work in a situation where tasks are divided. Finally, the developers suggest that students will experience "1) the challenge of carrying out individual tasks; 2) the responsibility of working to make contribution to a group; 3) the necessity of dividing responsibility in order to solve large problems; 4) the satisfaction resulting from effective role playing; and 5) the frustration and helplessness when facing the unknown hazards of nature."

Content

The content focus of *Discovery* is upon the early colonization of America. The players study a variety of maps depicting geographical features and natural resources so they can determine good landing sites. Various reasons for exploration and colonization are discussed, and during the simulation the players' actions are restricted according to the particular goals they expect to achieve by colonizing. Decisions as to supplies which must be purchased, material possessions which should be taken along, and ways to interact with the Indians must be made. Sailing Cards and Action Cards suggest real situations which explorers must face as they seek to colonize new land, provide themselves with sufficient food, and earn Colonization Points (units utilized to determine colonial wealth). Each group's success is dependent upon the active participation of all group members in the colonization struggle.

Procedures

The Coordinator's Manual of *Discovery* provides detailed daily lesson plans plus a unit time chart to guide the development of the simulation exercises. The techniques and teaching strategies are varied to reach an array of cognitive, affective, and skill objectives. The activity opens with an attitude survey in which the opinions and beliefs of the students concerning exploration and colonization are surveyed. Intensive map study and map-making exercises taking several days culminate the first phase of the simulation. The second phase is concerned with a number of decision-making tasks in which the specific reasons for undertaking colonization are determined and final plans are made for provisioning the voyage. In phase three the students role play sailing, landing, defending, and maintaining the newly established colony. Records of the results are kept. Debriefing is devoted to an evaluation of the information, skills, and attitude changes of the students; of the group interactions which took place during the simulation; and, finally, of the simulation itself. The winner in *Discovery* is the group or colony which completes the game with the most COLPS (colonization points which are the units used to determine colonial wealth).

Evaluative Comments and Suggestions

Discovery offers an opportunity for the teacher to go beyond traditional textbook approaches to the study of North American colonization. The multiplicity of strategies employed should serve to involve students and keep them interested in the unit. The teacher will have to spend several hours reproducing the materials necesary to implement the game.

DISUNIA

Developers:	**David Yount and Paul DeKock**
Publisher:	**Interact Company** **Box 262** **Lakeside, California 92040**
Publication Date:	**1968**
Availability:	**From publisher**
Grade Level:	**9-12 (Adults)**
Subject Area:	**American History and Political Science**
Number of Players:	**20-35**

Overview

Disunia is a simulation game designed by David Yount and Paul DeKock for use in high school American history and political science classes to examine the development of the United States Constitution in the historical period from 1776 to 1789. This game is popular with many teachers because it combines traditional research activities and emphasis on cognitive skills with role-playing activities in a simulated environment.

Materials and Cost

Materials Package:

- One 8½" x 11" booklet with removable plastic binding; booklet is designed as a guide for the teacher to use in producing the game materials; each page may be removed individually and duplicated for classroom use; instructions are given the teacher for making name tags, Pressure Cards, and other necessary materials; booklet contains the following:
  - Coordinator's Manual: 28 pp., includes rationale, directions, three-week schedule of time for game activities, miscellaneous teaching suggestions, content to be used in making Pressure Cards, Basic Student Assignments (to be required of all students), Depth Assignments (to be used optionally as advanced work), game forms, Steps for Giving a Formal Persuasive Speech, Outline of Simple Parliamentary Procedure, Student Performance Tests with a Teacher Answer Guide
  - Student Manual: 4 pp., includes History of Disunia, explanation of tasks and rules, and the Articles of Confederation of the United States of Disunia

Total Package (One Booklet)	$10.00

Required or Suggested Time

The authors provide a three-week itemized schedule of activity for use of this game. Called a Unit Time Chart, this schedule delineates what each student and the teacher will be doing throughout the three-week period. Student time is divided between simulation activity and required (Basic) assignments; however, the additional research (Depth) assignments which are suggested in the Coordinator's Manual could easily be the basis for expanding the use of the game beyond the suggested three-week time period. The length of classroom time spent each day is not clearly specified; however, one hour of classroom time spent each day for the three-week period is sufficient. The Basic and Depth Assignments will involve student time spent out of class.

Intended User Characteristics

This game has been designed for use in American history and political science classes by junior and senior high school students; adults could also use the game. Its flexibility for use at different age levels is based on the fact that the game itself is designed to depend upon use of supplementary resource materials. These materials may vary in complexity; for example, 7th-graders might read elementary analyses of the problems faced by early American citizens, whereas senior high school students could read sophisticated analyses of the divergent political philosophies of the writers of the United States Constitution. Students need minimal computational skills in order to keep track of their military resources, population, wealth, etc.

The teacher should have some background in United States history; understanding of political science and economic theory would be particularly helpful to the teacher when using the game at upper grade levels.

Students need to be able to work in small groups during the simulation activities. An extensive resource center or library would be helpful in facilitating the students' research activities.

Rationale and General Objectives

Interact games are designed to combine traditional classroom learning and research activities with gaming and simulation concepts. The authors believe that students will learn and will enjoy learning if they are seeking understanding and information in the context of a simulated environment. Specific objectives stated in the Coordinator's Manual include having students understand the underlying principles which formed the basis for the United States Constitution, appreciate the problems encountered by the 13 states under the Articles of Confederation, and admire the men who were able to produce the United States Constitution. Students are also to acquire fundamental skills in group work, parliamentary procedure, public speaking, and research techniques. Acquisition of sophisticated research techniques is particularly aimed at the advanced student.

Content

The simulation activities for *Disunia* involve students working as members of seven different states which exist in a country called Disunia. Each of the students assumes the role of a citizen in the country in which he lives and participates as a part of the community to achieve economic and political stability and military security. Supplementary resource materials selected by both the teacher and the students enrich the content of the three-week activity. The Basic and Depth Assignments which are listed in the Coordinator's Manual require examination of fundamental principles of United States government in its formative stages, particularly during the period from 1776 to 1789. The assignments are designed to provide the students with information about the Declaration of Independence, the Articles of Confederation, the Constitution of the United States, the founding fathers of the United States, the various political debates and conflicting philosophies apparent during the period from 1776-1789, and the struggles involved in the formation of a system of government until the writing of the U.S. Constitution. Research skills are emphasized in completing the Basic and Depth assignments; skills in parliamentary procedure and speech-making are emphasized during the simulation portions of the three-week activity. As a result, students acquire some practical academic skills as well as appreciation for and understanding of the problems faced by the early citizens in the United States as they struggled to establish an effective form of government.

Procedures

Students are divided into seven states with approximately five students as citizens of each of the imaginary states. A citizen's chart is made for each state which includes the names of the citizens, their vocations, their duties in their community, and their wealth points. The teacher should provide a folder which includes the necessary game forms for each of the states and should also duplicate those of the Basic and Depth assignments which are to be used during the three-week activity. Additional and supplementary assignments could be reproduced during the course of the activity also. During the simulation, students trade to acquire wealth, write bills for Congress to consider, give persuasive speeches to try to get the bills passed, form alliances, and consistently attempt to improve their individual wealth and security as well as the stability and security of their state. The simulation activities are interspersed with research activities. The research assignments and simulation activities culminate in a Constitutional Convention. The teacher gives three performance tests during the three-week activity.

Evaluative Comments and Suggestions

This game is popular with many teachers because it is a three-week unit of study which combines traditional research activities and emphasis on cognitive skills with a simulation activity designed to increase student involvement in the learning process. The performance tests, the detailed instructions for student research activities, and the guidelines for giving persuasive speeches which are all included in the Coordinator's Manual are particularly helpful to both the teacher and the students.

DRUG ATTACK

Developer: Lockheed Aircraft Corporation
Publisher: Technicon Education Systems
590 E. Middlefield Road
Mountain View, California 94040
Publication Date: 1971
Availability: From publisher
Grade Level: 6-9
Subject Area: Health Education, Social Problems, Sociology, and Psychology
Number of Players: 3-5

Overview

Drug Attack was designed as an important phase of a comprehensive drug education program called *Drug Decision* developed by the Lockheed Aircraft Corporation, Information System's Division. The program is intended "to give the student an understanding of drug abuse without preachment." In the game students are asked to apply the knowledge they have gained in earlier phases of the program to this simulated "drug attack" upon their community. Students adopt key roles in the fight against drug abuse in their community and compete to determine who (if anyone) will solve the crisis caused by an invasion of drug pushers.

Materials and Cost

Materials Package:
Cardboard box, 9" x 11½", contains the following:
Coordinator's Manual: 6 pp., 8½" x 11", unbound paper pamphlet; includes instructions for playing game and "Summary of Drug Facts"
Additional Materials: One game board, 17¼" x 17¼"; 1 Mayor's Information Card, 8½" x 9¼"; 5 red pusher tokens; 5 blue user tokens; 1 red health officer token; 1 blue agent token; 1 package of health officer cards; 1 package of agent cards, 5 number stickers; and 5 name stickers
Total Package $6.00

Required or Suggested Time

This simulation was designed for three class periods. However, one of the three periods has been designated as an introductory lesson based upon a film included within the course. The teacher might utilize other materials for the introductory session.

Intended User Characteristics

Drug Attack was designed to be used within the *Drug Decision* program developed by Lockheed for students in grades 6-9. The simulation's placement in the course requires participants to make use of extensive knowledge concerning drugs which is learned prior to the simulation. Teachers should be well versed in drug education before introducing the simulation.

Rationale and General Objectives

The developers' rationale is that many drug education courses have failed because they tell the students "what and how to think about drug abuse. . . ." *Drug Attack* is designed to place students into simulated situations requiring "disaster management" and have them apply what they have learned previously in the *Drug Decision* program by taking roles and making decisions on the basis of varying perspectives. The objectives that the simulation is designed to achieve are: "1) Have students exercise information that they had learned about the physical appearance of drugs and volatile chemicals, and their effects to the abuser. 2) Implant and reinforce the idea that members of a community must cooperate to prevent a 'drug disaster' (as yet undefined), lest they experience ruined lives, rampant drug crime, and financial bankruptcy. 3) Implant and reinforce the idea that community professionals who detect, prevent, and fight 'drug disasters' and treat their victims are 'good guys.' 4) Implant and reinforce the idea that drug abuse is primarily a health problem. 5) Implant and reinforce the idea that drug pushers are interested in making money without regard for human life. 6) Have students decide whether particular instances of drug abuse warrant therapy and counseling (with juvenile authority involvement) or hospitalization (with juvenile court involvement)."

Content

Drug Attack is a simulation of a community attempting to combat an influx of drug pushers and increase in drug abuse. It is a role-playing board game in which the players represent the Mayor of a community, one or two Agents, and one or two Health Officers. Pushers and Users are represented by tokens, which are moved into and through the community (on the squares on the board) by the Mayor. The Agents and Health Officers, by moving their tokens on the board, attempt to catch the Pushers and Users. If they do catch them, they use their previously acquired knowledge to identify the drug involved in the case before deciding what measures (such as legal proceedings or counseling) ought to be taken, and the Pusher or User can be taken out of the game. In addition to moving the Pushers and Users, the Mayor is in charge of disbursing funds from the Community Fund for the fight against the "drug attack" and returning funds to the treasury when Pushers and Users are successfully apprehended and dealt with. At the end of the game, the performances of the Agents and Health Officers are measured by the number of Pushers or Users they have dealt with successfully. The community's overall performance is determined by combining the numbers of Pushers and Users eliminated from the game with an adjusted index of the amount of money left in the community's coffers. When several games are played in the classroom simultaneously, the community scores may be compared to determine the "winner."

Procedures

The Mayor starts play by drawing a chance card and following the printed instructions. Some cards instruct him to move Pushers, some require him to move Users, and others ask him to distribute community funds. The Agent token moves next. When a Pusher has been apprehended, the Agent must correctly identify the drug described in a case which he reads aloud from an Agent Card in order to get the Pusher out of the game. The Health Officer, who can give treatment only after correctly identifying the drug which the User has taken, plays next. The play continues in this fashion until one of the following has taken place: 1) the Agent has removed all Pushers; 2) the Health Officer has reached and treated all Users; 3) the mayor has exhausted all community funds in drug costs. When larger groups are involved, each game (community) competes against the others.

Evaluative Comments and Suggestions

The original *Drug Decision* course developed by Lockheed was field tested with approximately 20,000 students. Technicon then made revisions of the original material. Most of the students "rated the game's usefulness as high" and indicated that it helped them better understand the "jobs of professionals in the community who fight the drug problem."

Drug Attack seems to be exceptionally valuable only when used in conjunction with a comprehensive drug education program. It depends heavily for its motivational value and success on the ability of players to apply previous learnings about drugs to the game situation, and would require the teacher to develop and present extensive background before playing if used apart from the *Drug Decision* or some other similar program. Also, if the game were purchased and used separately, the teacher would have to develop his own strategy for debriefing—a crucial part of any instructional game—since none is included within the game itself.

References

Nelson, R.L. "The Drug Attack Game: How It Was Designed." Unpublished paper available from Lockheed Aircraft Corp. 10 pp.

ECOLOGY

Developers: Bert Collins, Richard Rosen, and Margie Piret
Publisher: Urban Systems, Inc.
1033 Massachusetts Avenue
Cambridge, Massachusetts 02138
Publication Date: 1970
Availability: From distributor
Grade Level: 6-9
Subject Area: Ecology and History
Number of Players: 2-4

Overview

This is an instructional board game that illustrates the relationships between man's activities and his natural environment. Players compete for land area space in a world in which population density continually increases. The incidence of war is inevitable in the course of the game. The winner of the game is the first player with the required balance of people, money, inventions, and ecology points who passes the Ecology Test in any of the four ages of development—Hunting, Agricultural, Industrial, and Environmental. The game relies largely on chance and can be used more effectively with upper elementary and junior high school age students than with older students. It is one of the few ecology games available for elementary students.

Materials and Cost

Cardboard box, 20¼" x 10½" x 2", contains the following:

Coordinator's Manual: 5 pp., 5¾" x 8¼", folded paper; includes object of the game, description of parts of the game, explanation for playing the game

Additional Materials: playing board, 19¾" x 19¾"; 34 blue rings; 39 white rings; 35 red rings; 35 green rings; 20 Luck Cards; 23 Genius Cards, 21 Work Cards; 103 Ecology Point Cards; 25 $10 Bills; 25 $50 Bills; 20 $100 Bills; 2 Dice; 1 War Chart; 1 Entry Test Chart; 1 Test Chart; 1 Population Density Chart

Total Package $7.00

Required or Suggested Time

This game can be played easily during one or two class periods of approximately 40 minutes each. It is useful to have a third classroom period set aside for the debriefing.

Intended User Characteristics

No reading or mathematical computations are required by students, beyond reading chance cards and counting to 25. The teacher can prepare to teach the game in less than half an hour.

Rationale and General Objectives

This game was designed to focus attention on various problems which cause ecological imbalance, primarily because the developers believe that today's ecology is becoming dangerously out of balance. The game is designed to have students acquire some awareness of how both population and growth and man's development from hunting through technological ages make the maintenance of ecological balance more difficult.

Content

The game playing board has a central land area on which population groups are placed. Four areas representing the Hunting, Agricultural, Industrial, and Environmental ages of mankind are situated on the playing field outside the central land area. As the game is played, the participants find that if they continue to land on population squares and acquire more people, they will have difficulty in providing enough land space for them. To obtain more living space for his population, each player does one of three things: 1) spends the necessary money to improve his land and increase its size; 2) acquires more land from another player by trading or buying; or 3) fights a war to gain some other player's land space.

Procedures

The first player rolls the dice and looks at the square on which his game marker is situated. He then reads the numbers that he finds written on the edge of his square. If each of the two numbers he has rolled on the dice are numbers written on the same side of his square, he must then move to the next square by crossing the side that has the numbers on it. If, however, the two numbers are on different sides of his square, he can then choose which of the two directions he would like to move. As the players move across the game board, they roll the dice and land on spaces that give them ecology points, population, or chances to draw genius, luck, or work cards. Whenever a player increases his population, he must have land available for the additional people. Need for additional population space leads to intensification of land use, buying and trading of land, or war. A player who lands on an age test square may proceed to the next historical age if he has the requisite items written on the test square. All moves are determined by the roll of the dice. To win the game, a player needs to land on the Ecology Test square in one of the four corners of the board and simultaneously have the required items to pass the test.

Evaluative Comments and Suggestions

The game is much more attractive and useful with younger students than with older students. A serious weakness of the game is its reliance upon chance for game operation; game outcomes operate entirely on chance. To win the game, a player must pass the Ecology Test for the particular age in which he is living. But again, he has little control over his chances of winning since he must acquire his materials by landing on certain squares and cannot take the Ecology Test until he lands on a square that allows him to do so. It is particularly easy for students to become engrossed in rolling the dice and winning the game rather than paying attention to the intended instructional purposes of the game. Students can win the game without understanding its cognitive objectives. Even with its drawbacks, the game is useful; it is one of the few ecology games available for use with elementary students.

ECONOMIC DECISION GAMES

Developer: Erwin Rausch
Didactic Systems, Inc.
Westbury, New York 11590
Publisher: Science Research Associates, Inc.
259 East Erie Street
Chicago, Illinois 60611
Publication Date: 1968
Availability: From publisher
Grade Level: 12 (Adults)
Subject Area: Economics
Number of Players: 12-48

Overview

This series of eight "pencil and paper" simulation games is intended for students in a 12th-grade economics program or a first year college economics course. Through simulation and role playing, the participants observe, analyze, and solve problems of an economic nature. Each game consists of instructions, a fact sheet, and worksheets on which decisions are calculated and their consequences are recorded. Each simulation game can be played separate and apart from any one or all of the others. Any or all of them can serve as supplementary materials in an economics course. The students should have some previous experience in reading about these economic problems and the teacher should have substantial background in economics to insure classroom success with these materials.

Materials and Cost

For a typical class of 30 students, a teacher will need five student books of each game since each student book contains six copies of the game. A Coordinator's Manual that explains the procedures for teaching all the games and a copy of each of the student materials is included.

Materials Package:
Collective Bargaining. By Erwin Rausch.
32 pp., 8½" x 11", stapled paper cover
The Firm. By Erwin Rausch.
32 pp., 8½" x 11", stapled paper cover
The Market. By Erwin Rausch.
32 pp., 8½" x 11", stapled paper cover
The Community. By Erwin Rausch.
32 pp., 8½" x 11", stapled paper cover
Scarcity and Allocation. By Erwin Rausch.
24 pp., 8½" x 11", stapled paper cover
Banking. By Erwin Rausch.
24 pp., 8½" x 11", stapled paper cover
The National Economy. By Erwin Rausch.
32 pp., 8½" x 11", stapled paper cover
International Trade. By Erwin Rausch.
32 pp., 8½" x 11", stapled paper cover
A Guide to Teaching Economic Decision Games. By Erwin Rausch.
48 pp., 8½" x 11", stapled paper cover
Total Package $10.20

Required or Suggested Time

The author suggests that several rounds be conducted for each game so that students can play various roles within each game and acquire a better understanding of the concepts involved. In order to play several rounds, three to five 50-minute sessions are required for each game played. Each simulation game can be played separately and apart from any or all of the other simulation games. The games do not represent a course of economics study but can be used as supplements to an economics program.

Intended User Characteristics

Students using these simulation games will need a background in the study being considered. If they have not had previous experience with the economic concept under consideration, the author suggests that the students do some reading or the teacher do some lecturing on the matter. The teacher will need substantial background in economics for successful classroom implementation of these materials. A great deal of teacher preparation for use of each game will also be necessary.

Rationale and General Objectives

In the Coordinator's Manual, Erwin Rausch says that "there are relatively few occasions when young people are asked to represent the real world in abstract form, and many students find this difficult to do. Yet as institutions and equipment increase in variety and sophistication, the ability to move freely back and forth between the real world and its simplified abstractions becomes more valuable." Rausch further states that simulation games that represent simplification of reality are useful methods for learning abstract things and acquiring decision-making skill. The author believes that his games achieve these ends.

Content

In the simulation game *Collective Bargaining*, the students are involved in labor and management negotiation of a new contract. The players work on policy pertaining to wage increases, holidays, vacations, pensions, and insurance. Lack of settlement on these issues leaves the student with the decision of whether or not to strike and then how to settle or stop the strike. *The Firm* confronts the participants with economic problems involved in running a business. This simulation deals with the economics of the cost-price relation, income statements, balance sheets, and weekly cash accounts. *The Market* simulation game is designed to acquaint students with the concepts of price, supply and demand, and utility of a good. The aim of the simulation game entitled *The Community* is to encourage the students to create the most attractive, progressive community possible. Playing the game helps the students to see more clearly the relationship between wages and profits generated by local industry and the taxes available for community improvement. The author calls the simulation game *Scarcity and Allocation* a "Robinson Crusoe Game" because it deals with conditions on a desert island. The purpose in playing the game is to increase the standard of living of the people stranded there. The students playing the game must solve the problem of unlimited wants and limited resources available to resolve this conflict. The basic underlying principle demands that the players must choose among alternative solutions. *Banking* introduces the students to the financial, social, and decision-making activities of commercial banks. The participants represent banks in which economic decisions are made for stimulating the economy of an area on one hand and making a profit on the other. The game *The National Economy* is a simulation of a small country where only the businessmen make important economic decisions. The government is not involved. Representatives from various areas of industry sit down to make decisions that will influence the economy for the next 12 months. *International Trade* introduces students to a trading situation between the United States and the European Common Market. By trading two commodities, bushbats and skyhooks, the participants learn the concepts of comparative advantage, absolute advantage, production possibilities, and exchange price.

Procedures

Each game follows the same format for instruction. Each game is introduced by at least two periods of lecture and discussion in order to give students background information, to give them a chance to ask about the rules, and to introduce the economic concept under consideration. Next, the students enter into game playing sessions. The students are divided into teams on the basis of class size and the requirements of the particular game. Roles are rotated among students after each round to give everyone the opportunity to examine several economic positions involved in the final solution to a problem. Each game ends with a concluding discussion about the concepts learned during the game session.

Evaluative Comments and Suggestions

These games are very sophisticated and require a great deal of teacher preparation for successful use in the classroom. The first round or two will involve the students in asking questions to clear up confusing matters. The teacher will probably need to work through each game once or twice himself before using it for instructional purposes.

ECONOMIC SYSTEM

Developers: T. Robert Harris and James S. Coleman
Academic Games Associates, Inc.
Johns Hopkins University

Publisher: Western Publishing Company, Inc.
Education Division
850 Third Avenue
New York, New York 10022

Publication Date: 1969

Availability: From publisher

Grade Level: 9-12 (7, 8) (Adults)

Subject Area: Economics, Contemporary Economic Problems

Number of Players: 7-15

Overview

Economic System is a complex simulation game for junior high, high school, and adult students built upon the discipline of economics. Starting with a simple model (Level I), the game moves to more sophisticated levels of economic activity (Levels II-IV). To successfully play this simulation game, the teacher must do careful planning and become thoroughly familiar with game procedures.

Materials and Cost

Materials Package:

Cardboard box, 13" x 7" x 2½", contains the following:

Coordinator's Manual: 16 pp., 8½" x 11", stapled paper cover; describes game organization, various levels of the game, suggested follow-up activities, and suggested reading

Additional Materials: organized on three tiers: Tier 1 contains player folders (farmer, manufacturer, worker), score sheets, and price charts; Tier 2 contains resource cards, consumer goods cards, and money; Tier 3 contains additional player folders, raw materials cards, and production schedule cards for mines, farms, and factories

Game pieces are made of cardboard and are fairly durable. No instruments for student evaluation are provided.

Total Package $25.00

Required or Suggested Time

There is no required maximum time set for the game. Depending on the number of rounds played and the number of available variations introduced, it is conceivable that the game could take up to 20 class periods. To start the game properly, it is wise to spend a good portion of one class period explaining the rules and familiarizing the students with the game. After all players are familiar with the procedures, two rounds can be played in a 40-50 minute class period.

Intended User Characteristics

Game players should be able to follow rules and directions, do some arithmetic computation, and be able to do some planning. Little reading is required in the game itself; however, students should be able to do the limited reading assigned. These necessary math, reading, and organizing skills may pose problems for some junior high school students. Senior high school students and adults should have no problem with *Economic System*.

Extensive teacher preparation is necessary prior to playing the game. It is likely that the game objectives will be better achieved if the teacher has planned reading and follow-up assignments carefully. It is not necessary that the teacher have extensive training in economics to conduct the game.

The game can be played in most classrooms. It is necessary, however, for the scorekeepers to have tables on which to work.

Rationale and General Objectives

Often students in economics courses, both at the high school and college levels, go through these courses without a good grasp of fundamental processes of an economy.

Concepts such as exchange, interdependence, and collective action are often words which at best can be recalled only for test purposes. In-depth understanding of and experience with economic processes are needed.

In the Coordinator's Manual of *Economic System*, the authors state that by playing the game, students learn or experience: 1) the effects of supply and demand in determining prices; 2) the fact that the value of money depends entirely on the prices of goods and labor; 3) the interdependence of the various economic roles in a society; 4) the need for land, labor, and capital in the production of goods; 5) the strength of collective action by persons with the same economic role (i.e., labor unions, manufacturers' cartels, etc.); and 6) the effect of wages on prices and prices on wages—"wage-price spirals." Students should also acquire an appreciation for the difficulties which various individuals (workers, farmers, manufacturers, government employees) encounter in operating within an economic system.

Content

Economic System is structured around the discipline of economics. Starting at Level I with a simple model of the economic system, variations in the game allow the players to progress through more complex levels until they are involved in the intricacies of a highly developed economy.

Although the authors do not start from the position that human wants exceed economic resources, the concept of scarcity is built in throughout the game. In Level I the concepts of production, marketing, consumption, and interdependence are simulated. Money, as used in the game, functions only as a medium of exchange and not as a store of value. Players receive "satisfaction points" for consumption. The point schedules are based on the principle of diminishing marginal utility. Most of the content at this level can be directly related to what economists call microeconomics.

As the game progresses to higher levels, (Levels II-IV), macroeconomic concepts become predominant. Capital investment, government expenditures, and taxation are introduced. At appropriate points at these levels, students are able to investigate problems of public policy. In addition, students can explore international trade theory and analyze comparative economic systems.

Procedures

The object of the game is consumption of food and/or manufactured goods. The player with the highest consumption point total (satisfaction points) is the winner. Initially, players assume the role of either worker, farmer, or manufacturer. After making production decisions, which involve farmers and manufacturers in buying labor and allocating capital goods, all players operate either as buyers or sellers in a simulated market. After exchange takes place, players make decisions about what they want to consume. Since money held after consumption does not give players reward points, it behooves all players to spend most of their money for food or manufactured goods. Farmers and manufacturers, of course, must plan for production in the following rounds.

As the game progresses to other levels, players are given the chance to work overtime; food not consumed "spoils" and players lose points; manufacturers can improve their plants; and natural resources are introduced into the production stage. Variations of the game may include change of the initial resource distribution, trade initiation between economic systems (if two games are being played simultaneously), taxation and government expenditure, and government regulation and/or control.

At least seven players are needed to play *Economic System*. Fifteen players constitute the maximum number per game; two of these players are assigned as scorekeepers. Different groups of students may be playing the game simultaneously within a classroom.

Because of the complexity of the game, the teacher (coordinator) must become well prepared ahead of the actual playing time. Scorekeepers should be thoroughly briefed in the gaming procedure before the game begins.

Evaluative Comments and Suggestions

Few evaluative data are available. The complexity of the game is likely to cause a good deal of frustration in the initial stages. However, if the teacher carefully works through the initial rough spots, use of this simulation game can be very successful. According to the authors, ending the game is its greatest weakness. They state that "in order to be truly accurate, a game which simulates an economic system should never end." By "cashing in" their food and manufactured goods and being required to have approximately the same amount of money they started with, players arrive at a final point total which determines the winner. This is an unrealistic situation in the real world, but necessary in this game.

ECOPOLIS

Developer: **John Wesley**
Publisher: **Interact Company**
Box 262
Lakeside, California 92040
Publication Date: **1971**
Availability: **From publisher**
Grade Level: **4-6 (7-10)**
Subject Area: **Interdisciplinary**
Economics, Environmental Education, History, Political Science, and Sociology
Number of Players: **18-35**

Overview

Developed by John Wesley, an experienced elementary teacher, *Ecopolis* is an elementary level adaptation of Interact's simulation game, *Balance*. *Ecopolis* deals specifically with modern environmental problems and what is being done to solve them. It has been designed as a three-week instructional activity for studying population and land use and abuse. The game is recommended for use in grades 4 through 6 and is designed for total class participation.

Materials and Cost

Materials Package:

One 8½" x 11" booklet with removable plastic binding; booklet is designed as a guide for the teacher to use in producing the game materials; each page may be removed individually and duplicated for classroom use; booklet contains the following:

Coordinator's Manual: 32 pp., includes purpose of the simulation; objectives; overview, set-up directions; daily lesson plans; Ecology Information Sheet; GASPS Balance Sheet; Crisis Paper 1; Crisis Paper 2; Forum Position Paper Instructions; Community Meeting Evaluation Sheet; Bonus GASPS Projects Sheet; Outlines of Crisis Papers 1 and 2; Survey: Americans and Ecology; Real World Project Form; Crisis 1 and 2 Identities; masters from which to make overlay transparencies: 150 Years Ago (map); and Alcott County Park (map)

Student Manual: 2 pp., contains information about Ecopolis and tasks to perform during simulation; 35 per package

Total Package (One Booklet)	$10.00

Required or Suggested Time

The developer provides a 15-day schedule in the form of a Unit Time Chart. It is intended only as an example to be altered as needed.

Intended User Characteristics

The game is intended for use by 4th, 5th, and 6th graders. Students may experience some difficulty with the reading level required, and teacher adaptation may be necessary in this area. The game may be appropriate for 7th and 8th graders and perhaps as high as 10th grade. The teacher should have some familiarity with basic ecological concepts in order to use the game.

Rationale and General Objectives

The developer of *Ecopolis* is concerned with helping students to better understand and appreciate "the many problems which constitute the current ecological crisis." The Coordinator's Manual lists the following "experiences" as objectives of playing *Ecopolis*: "*Knowledge*: 1) the concept of the ecosystem; 2) how man's attitude toward his physical environment shapes and changes that environment; 3) the degree of pollution in America—its casues and possible solutions; and 4) the problems associated with over-population; *Feelings*: 1) appreciation of nature's delicate balance; 2) appreciation of various community interest groups and how they affect the community's ecology; 3) an understanding of how various special interest groups interact in an attempt to gain their objectives; 4) the responsibility of committing yourself to voice a stand for or against specific ecological proposals; *Skills*: 1) outlining material present in a short essay; 2) taking notes during an open meeting; 3) using material provided to support general statements about pollution and over-population; 4) role playing various members of a community facing an ecological crisis; and 5) defining your viewpoint in front of a group."

Content

Ecopolis focuses on the relationships between man and his ecosystem and the origins of the earth's present ecological predicament. It is divided into two stages. Stage I is a simulation in the classroom of the ecosystem of America 150 years ago. "The students are 'born' as insects, animals, Indians, and pioneers" living in the 1820s. As the instructor introduces various ecological concepts "insects and animals move, die, or adapt to the changing environment being reshaped by growing numbers of westward-advancing and technology-carrying American pioneers."

Stage I ends with the establishment of Ecopolis—a contemporary city. Stage II builds on what has been learned about the ecosystem in Stage I. It revolves around two specific problems facing Ecopolis: "the problem of our land and how we use and misuse it, and the problem of the people and an ever-increasing population."

Procedures

In Stage I of the game, the students take roles as insects, animals, Indians, and pioneers, placing themselves at designated spots on a large map on the floor of the room. As the teacher reads the history of the ecosystem, broken down into "moments," characters lose or acquire population status slips, or GASPS (Goal And Satisfaction Points). At the end of Stage I, points from the slips are totaled.

In Stage II, students are divided into two groups for each "crisis"—one assuming an "active role in studying and role-playing a crisis" and the other taking "a passive role in observing and evaluating the other group during one crisis." To simulate community life and activity, students actively participating in the crisis get identity cards outlining specific interests and attitudes and then play their assigned roles in a community meeting attempting to resolve the crisis. Following the meeting the whole class gets involved in a debriefing that "a) evaluates how the role-playing students handled the crisis, and b) gives everyone a chance to express his real convictions about what should be done to solve the problem."

Throughout the game, students may engage in extra activities (e.g., reports, scrapbooks, cleaning up yards) to earn bonus GASPS.

Teacher preparation for the game is outlined in detail in the manual. The major responsibilities of the teacher are to copy and collate the materials, arrange the physical set up of the game, read the History in Stage I, and introduce certain ecological principles at appropriate times.

Evaluative Comments and Suggestions

Ecopolis appears to be a very realistic game dealing with our environmental problems. It seems to have a high interest level, which is further enhanced by the alternation of active participatory and passive observational student roles. The game has much potential for leading students to an awareness of the complexity of solving what initially appear to be simple problems. The only part of the game that may produce stumbling blocks is the reading level of the material, which may be too high for slow or average intermediate level students. However, teacher modification and/or adaptation could easily overcome this concern.

EMPIRE, GAME OF

Developer:	**Education Development Center** **15 Mifflin Place** **Cambridge, Massachusetts 02138**
Publisher:	**Denoyer-Geppert Company** **5235 Ravenswood Avenue** **Chicago, Illinois 60640**
Publication Date:	**1970**
Availability:	**From publisher**
Grade Level:	**7-12**
Subject Area:	**American History**
Number of Players:	**15-36**

Overview

The *Game of Empire* was developed by the Education Development Center as a component of *The Emergence of the American* unit in the course *From Subject to Citizen*. However, the game may be used independently of the course by any junior or senior high school class studying the American Revolution. It is particularly well adapted to gaining insights about how economic problems arising from the conflict between British mercantilist policies and colonial economic interests led toward revolution. At the same time, the game illustrates the benefits colonial merchants received under the British system of trade. The game is played by seven teams, six of which play the roles of particular economic interest groups, and the seventh representing the British Navy. The competitive teams engage in trading, always with the purpose of trying to gain products not produced in their own area in exchange for what they have to sell, while the Navy attempts to protect legitimate interests and enforce regulations.

Materials and Cost

Materials Package:

Cardboard box, 21" x 13½" x 3¼", contains the following:

Coordinator's Manual: *The Game of Empire: Explanation and Guide*, 16 pp., 7½" x 10", stapled paper cover, illustrated; contains "Suggestions for Classroom Use," a section on "The British Empire in America," and instructions for graphing exercises and discussion following the game

Student Manual: 33 pp., 7½" x 10", stapled paper cover, illustrated, 32 per box; contains all instructions and necessary information for playing the game, data sheets, and information for use with follow-up activities

Additional Materials: 1 glossy map of the Atlantic Trading Community, 48" x 39"; 7 pads of exporter's contracts and shipping force; 7 compartmentalized plastic boxes; 30 cardboard ships; 272 pieces of play money; 116 playing cards

Total Package	$49.95

Required or Suggested Time

If the teacher has made the preparations suggested in the *Explanation and Guide*, one class period is sufficient for getting the class oriented and into playing the game. Four to five more class periods of 40-50 minutes should be planned for playing. Follow-up activities using data sheets on the British Empire and discussing or debating "Who Benefits Most from the Empire?" can require considerable additional time according to the interests of the teacher and class.

Intended User Characteristics

The game is appropriate for use in grades 7-12. General background information about the British Empire and the development of Colonial America would increase students' comprehension of what is happening in the game and enable them to simulate more realistically the situation to which the game is intended to correspond. Simple mathematical skills (including percentage) and a 7th-grade reading ability are needed by at least one member of each team. The playing area should be large enough for participants to cluster about the large map, displayed on a large table or the floor, and there should be room for participants to move about to negotiate with other teams. There should also be a chalkboard or large posterboard visible to all for displaying rules and other information basic to the game. The teacher should expect a good deal of noise, excitement, and movement while the game is in session.

Rationale and General Objectives

The *Game of Empire* was developed as a true simulation game. That is, it not only attempts to approximate a real situation, but it also has all the essential components of a game—specified rules and procedures, elements of chance, and winners and losers. The game demands a high level of interaction between participants, incorporating both cooperative teamwork and keen competition between teams. While it is designed to lead students to both conceptual awareness and cognitive information about the economic and political realities of the time, it is also intended to lead into clarification of significant value issues. The game encourages discussion about questions having to do with the fairness of the law (British Mercantile Regulations), racial discrimination (slaves as a commodity of trade), and cheating and stealing (smuggling and piracy).

Content

The historical setting for the *Game of Empire* is the Atlantic trading community, especially England and its American colonies around 1735. Each of the competitive teams represents an interest group which either produces or trades goods, and the interests of each group are in some way intrinsically opposed to the interests of the others. The teams are London Merchants, New England Merchants, European Merchants, Colonial Farmers, Southern Planters, and British West Indian Planters. Each team negotiates with the others for the buying, selling, and shipping of goods with the objective of increasing its own wealth at the expense of others. Teams may break the law, but must always consider the risks involved with the British Navy, which enforces customs and revenue regulations. They must also contend with the risks of piracy and disasters at sea. At the outset of the game, some teams have an apparent advantage in terms of wealth, particularly the British Merchants. However, any team can win the game, since winning is decided by percentage increase in wealth, not absolute quantities.

Procedures

There are a number of preliminary steps, all suggested in the guide, which, done in advance of the game, will greatly expedite the process of getting started. The method of forming teams and making assignments is optional, but if the teacher chooses to do it, he should consider the rationale for the mixes of students. The game proceeds through a series of timed "trading periods" (not more than ten minutes each), each followed by a "shipping period" when ships are moved across the map. At the end of each session, the teams tabulate their gains and losses. The winning team is the one that makes the greatest percentage gain in wealth. Most important are the post game debriefing exercises in which students share what they have learned and apply their understandings to the historical period under study and to analogous contemporary situations.

Evaluative Comments and Suggestions

The *Game of Empire*, like all activities in *From Subject to Citizen*, is intended to promote inquiry on the part of the student. Presented with data, the student becomes his own historian. Although the game appears at first glance to be rather complicated, experience has shown that, with good teacher preparation, a class can get involved fairly quickly in play.

The game, as well as other materials in the course, was extensively field tested, evaluated, and revised prior to final publication. Although first developed as a junior high course, *From Subject to Citizen* is now recommended for students grades 8-11. The *Game of Empire* can be played successfully by junior high students, but would in no way insult the intelligence of students at higher levels.

References

Risinger, C. Frederick. "Education Development Center, Incorporated." *Social Studies Curriculum Materials Data Book*. Boulder, Colo.: Social Science Education Consortium, Inc., 1972.

EQUALITY

Developer: **John Wesley**
Publisher: **Interact Company**
Box 262
Lakeside, California 92040
Publication Date: **1971**
Availability: **From publisher**
Grade Level: **4-8**
Subject Area: **American History, Contemporary Problems, Sociology, and Urban Studies**
Number of Players: **20-36**

Overview

"*Equality* is an elementary school adaptation of *Sunshine*, a secondary school simulation written by David Yount and Paul DeKock" of the Interact Company. It was designed as the basis of a four-week simulation and gaming instructional activity about the struggle for racial equality in a typical American city. "The simulation opens with a brief study of a mythical urban society and its slavery. As students write imaginary diaries of their lives as slaves, they begin to understand what happens to a free man's personality when someone 'owns' his body. Because of their 'birth' as members of a black, white, red, yellow, or brown ethnic group at the beginning of the simulation and because of what happens to them in their simulated neighborhoods, students become concerned about the issues of race relations in the classroom. Students particularly learn about the history of Black Americans, feel certain of the pressures minorities feel, and finally face a community crisis which they try to resolve."

Materials and Cost

Materials Package:

One 8½" x 11" booklet with removable plastic binding; booklet is designed as a guide for the teacher to use in producing the game materials; each page may be removed individually and duplicated for classroom use; booklet contains the following:

Coordinator's Manual: 33 pp.; includes rationale, overview, set-up instructions, four-week time schedule, daily lesson plans, role playing suggestions, description of the fantasy situation (Fantasia), Ugly Diary Entries, Community Identities, Image Point Balance Sheets (IMPS), Pressure Cards, 5 basic readings, basic readings quiz, community crisis materials, and debriefing evaluation

Student Manual: 4 pp.; includes explanation of tasks and rules and a description of the city of Independence; 35 per package

Total Package (One Booklet)	$10.00

Required or Suggested Time

The developer provides a Unit Time Chart which suggests a four-week schedule of teacher and student activities. The lesson plans elaborate on the chart and illustrate one way in which to conduct the simulation using 20 classroom periods of approximately one hour each.

Intended User Characteristics

Since *Equality* is usable by students in grades 4 through 8, the teacher will have to modify the basic suggestions given in the lesson plans according to students' ages, abilities, and backgrounds. Although no special teacher background is required, the teacher should be able to function effectively and comfortably as a facilitator in small group learning situations, rather than as an instructor in a traditional role. It would also be helpful for the teacher to have some background in United States' civil rights legislation, contemporary urban problems, and Black history.

Rationale and General Objectives

Like all Interact games, *Equality* reflects the developers' belief that simulation can be used effectively in the classroom to teach concepts, skills, and attitudes. As a series, Interact explores some of the most urgent and controversial issues in America. The particular focus in *Equality* is on just one element of the reality of the city—race and ethnic relations. Through role playing, readings, and small group discussion the students are encouraged to inductively discover ways in which people of differing ethnic backgrounds can learn to live together. Specific decision-making and problem-solving experiences provided are: questioning; supporting a general statement with specific detail; group problem solving; speaking persuasively; and using elementary parliamentary procedures. Affective experiences included are "appreciation of the importance of self-image to a meaningful life; sensitivity to other people's problems; emotional commitment to an idea or a cause; irritation when 'Fate' erodes minority group members self-images; and, desire to reveal feelings about how to solve America's racial crisis."

Content

Equality opens with a story called Fantasia. Deep lavender colored, human-like beings from another planet land in North America and kidnap, drug, and enslave the children, later calling them Uglies. This three day discovery activity introduces the class to the concepts of slavery and freedom, and opens the door to the development of an understanding of race and ethnicity. Readings of minority literature, such as *The Me Nobody Knows*, are an integral part of this fantasy activity. The simulation actually begins when the students assume the roles of citizens of Independence, a multi-ethnic, imaginary American city of 340,000 which was incorporated in 1889. Black, Chicano, Southern European, Oriental, Indian, and White residents are included in the simulation as well as a realistic population cross-section divided according to sex, occupation, education, socio-economic level, and attitude. Six typical neighborhoods are designated which range from Center City to the lush Country Club Estates, and students actually move into their own neighborhoods and simulate the urban environment in the classroom. They next gather real data by reading, discussing, and writing about the history of Black Americans. Throughout, students seek to increase their self-image which can be enhanced or eroded by Pressure Cards which represent chance striking their lives. Blacks particularly suffer from the impact of unfavorable Pressure Cards. As students role-play situations which illustrate key problems in urban human relations, they learn how environments can ruin or support self-images; how verbal communication can generate friction between ethnic groups; how conflict arises in various encounters because of different values and attitudes; and how various individuals perceive group differences. A final issue or community crisis over whether or not to integrate the schools provides students with the opportunity to simulate a community-wide problem solving activity.

Procedures

The Coordinator's Manual gives a concise overview of the simulation procedures. The first two days are devoted to the reading and discussion of Fantasia. This activity and the responses made in the Ugly Diary assist the students to develop an awareness of the crucial issues involved when one person dominates another. During sessions three and four, students read and discuss literature about various ethnic groups preparatory to assuming roles in the imaginary city of Independence. Next, individual roles and identities for the students are established and shared, the six neighborhoods set up and the self-image points explained. The students work to improve their self-images throughout the simulation, gaining or losing points for their efforts. The final, or community crisis, activity takes four or more days and begins with a school board election, reading and discussion of the problem, a proposal for school integration, and an illustration of persuasive discourse at a community-wide meeting. A debriefing evaluation is provided in the Coordinator's Manual which allows students to carry on their own evaluation discussion in various ways.

Evaluative Comments and Suggestions

Like *Sunshine, Equality* is a well-organized and thoughtful simulation game. The materials suggested and the instructions included in the Coordinator's Manual are effectively designed to promote an exciting role play learning experience concerning the complexities of urban ethnic relations. The game is inexpensive and easy to use.

EXPLORERS I

Developer:	**Jay Reese**
Publisher:	**Simile II** **1150 Silverado** **La Jolla, California 92037**
Publication Date:	**1972**
Availability:	**From publisher**
Grade Level:	**5 (4-6)**
Subject Area:	**Geography and History**
Number of Players:	**18-35**

Overview

Explorers I is a simulation game designed to provide students in upper elementary grades with the opportunity to "experience the thrills and disappointments of the early explorers of North America." Students are formed into teams of explorers who travel across the ocean; and, when they discover land, make decisions whether to continue exploring or to settle. Because the game lends itself to a variety of adaptations, it can be played a number of times by the same students.

Materials and Cost

Materials Package:

Heavy paper envelope, 9¾" x 12¾", contains the following:

Coordinator's Manual: 11 pp., 7" x 8", stapled paper cover; includes directions for play, variations of the simulation, a master map, suggestions for including other subjects, and questions for debriefing

Additional Materials: 34" x 22" grid for use as explorer map; 5 plastic map pins in various colors

Total Package	$4.50

Required or Suggested Time

The developers recommend that *Explorers I* be played for 15 to 20 minutes at a time over several days until all land area has been discovered. The game can, however, be played for longer periods of time and completed in two to three days. The larger the number of students playing the game, the more quickly all the land will be discovered.

Intended User Characteristics

Fifth grade students, studying the exploration of America, can best use the simulation. By adding variations suggested in the Coordinator's Manual, the game could be used through the 8th grade. Any elementary social studies teacher can easily implement *Explorers I*. The map must be mounted on a bulletin board (see map dimensions in Materials and Cost section above), and the bulletin board should be low enough for 5th grade students to reach comfortably.

Rationale and General Objectives

In the Introduction to the Coordinator's Manual, Jay Reese notes: "I wanted my fifth graders to experience the thrills and disappointments of the early explorers of North America. I wanted them to start a voyage not knowing where they were going or what they might see, to have the confirming experience of sighting land and the privilege of naming it. So came *Explorers I*." It is anticipated that students will understand the feelings and problems of explorers; recognize some of the reasons for disputes over land; become familiar with the meaning and use of map symbols; begin to understand why cities are located where they are.

Content

Explorers I is designed around the single concept of land exploration. Students must move via rivers or oceans. They can move by land, although if they choose this route, they must build a city as their base of operations. The teacher can emphasize either geography or history. For example, if students have learned that cities are usually located near a water source, they will use this knowledge in recommending the best locations for cities. On the other hand, the teacher may wish to emphasize the competitive aspects of land discovery and relate it to the historical competition between Spain, England, and France in the New World.

Procedures

The class is divided into groups of three to five students. Each group represents a nation and is given a "ship" (a colored plastic pin) in which to explore for their country. They may claim all the land which they discover and establish trade routes for their King.

The map, which is a grid of 1" spaces, is pinned to a board, and each group places its pin in any space on the right hand side. The game begins with each team moving two spaces. The game coordinator has a "secret master map" from which he draws in the land forms, seacoast, or rivers that are in or immediately adjacent to each explorer's square. The teams then analyze the area where they have landed and decide where to move next. After the first move of two spaces, moves may be made as follows: 1) two spaces a day in any direction on the ocean; 2) one space a day on land; 3) one space a day up a river; 4) two spaces a day down a river; 5) one space in two days over mountains, deserts, or swamps. When a team discovers land, they claim it by coloring the area with their nation's colors. Claims for disputed land can be settled by trade, agreement, or arbitration. When traveling over water, the ship serves as a home base, but when traveling over land, teams must skip a turn in order to build a city. The game is completed when all land has been discovered.

Evaluative Comments and Suggestions

Explorers I is a very simple game to conduct. Student interaction is high, and the addition of variations can add both to student interaction and learning. The developer suggests three variations in the Coordinator's Manual. For example, the teacher can make up experience cards to be drawn by explorers each round to add new dimensions or enriching concepts. Examples might be, "Sickness in camp forces you to wait a day," or "Hostile native tribes force you to stop and build a fort." The Manual also contains suggestions for related activities in art, history, language arts, and science.

EXTINCTION

Developer:	**Stephen P. Hubbell** **University of Michigan**
Publisher:	**Sinauer Associates, Inc.** **20 Second Avenue** **Stamford, Connecticut 06905**
Publication Date:	**1971**
Availability:	**From publisher**
Grade Level:	**9-12 (6-8) (Adults)**
Subject Area:	**Biological Science, Ecology, and Contemporary Problems**
Number of Players:	**2-4 (5-8)**

Overview

Extinction is a simulation board game designed for use by two, three, or four high school, college, or other adult players. The game was developed out of concern for an analytical and informative approach to teaching about environmental problems. It was devised to entertain while simultaneously teaching certain specific principles of ecology.

Materials and Cost

Materials Package:

Cardboard box, 13" x 10" x 1", contains the following:

Coordinator's Manual: 32 pp., 5½" x 8¼", stapled paper cover, includes game rationale, game summary, concept overview, suggested classroom and laboratory exercises

Rules Booklet: 13 pp., 6" x 9", stapled paper cover; includes game rules, strategy suggestions, definitions, suggested games for advanced players, and a short bibliography

Additional Materials: one 8½" x 11" game overview sheet; one 19¼" x 14¾" cardboard game board; 20 color coded population cubes (dice) for each player; one spinner; 6 decks of gene cards; 30 environmental chance cards; and 10 learner cards

Total Package	$11.95

Required or Suggested Time

This simulation game will take two or three hours to complete. The Coordinator's Manual suggests a number of game exercises which can be used at the teacher's discretion to shorten or lengthen the game. Post-game discussion can vary from 30 minutes to one hour.

Intended User Characteristics

Students must be able to multiply in order to participate in this game. Although classified as an adult game, *Extinction* has been successfully played at the 6th-grade level. Teachers must work through the game before playing it with a class. Although it is helpful if the teacher has some background in science, it is not essential for successful use of the game. An actual classroom demonstration of the game has been shown to be the best way to begin play. It is helpful if the classroom has been set up with tables and chairs.

Rationale and General Objectives

As stated in the Coordinator's Manual, "Environmental problems pose an immense challenge to traditional educational methods because of their inherent complexity and interdisciplinary character." The author calls for widespread public education about environmental problems so that the public will not be misled by sloganeering, simplistic talk, and misinformation about environmental issues. The overall objective of *Extinction* is "to teach players some basic concepts and vocabulary of population ecology." Key population processes emphasized are reproduction, migration, mortality, competition, predation, and genetic change.

Content

The overarching concept in *Extinction* is population. Population is studied in terms of crude and ecological density; clumped, uniform, or random dispersion; and population change in terms of natality, mortality, immigration, and emigration. These ideas are used to make inferences about interaction among populations with respect to predation, competition, control, and growth.

Procedures

Each player starts with 20 population cubes of one color. The cubes denote a particular species. The numbers on the cubes are used to denote population size. The cubes are used to occupy a hexagon space on the game board, called Darwinia. Each player begins with a genotype of seven genes which determine the following attributes: litter size, optimal habitat, mobility, predator characteristics, defense against predators, ability to cross natural and man-made barriers, and resistance to natural and man-made environmental changes.

The spinner identifies the ecological actions that players may take. These include reproduction, migration, competition/predation, gene change, environmental change, and place barrier. Players are required to reproduce, change the environment, and place a barrier when the spinner lands on these categories. The other actions are optional.

The game begins with the colonization of Darwinia. After two rounds of colonization, players pick cards from six gene card piles and begin to play. In sequence, players spin the spinner and choose ecological action. Players are to determine their strategies depending on the nature of their gene cards.

Play may take place within a specified period of time or until only one species remains. The winner of the game is determined either by the species remaining or by the species which has the highest population score at the end of the time limit. After a game has been played, the Coordinator's Manual and the Rules Booklet suggest variations for advanced players and options for teaching specific concepts. Lecture-discussion is suggested as a debriefing procedure.

Evaluative Comments and Suggestions

Extinction has been tested at the high school and college levels. The game procedures are clear and well-written. The Coordinator's Manual is sophisticated and provides substantial information about the vocabulary and concepts of ecology. Because the game involves a model of nature and some effects of man on nature, *Extinction* is potentially useful in both science and social science classes.

FAMILY LIFE INCOME PATTERNS (FLIP)

Developer: **Instructional Simulations, Inc. (ISI)**
Publisher: **Instructional Simulations, Inc. (ISI)**
2147 University Avenue
St. Paul, Minnesota 55114
Publication Date: **1970**
Availability: **From publisher**
Grade Level: **11-Adults (8-10)**
Subject Area: **Economics**
Number of Players: **2—As many as desired**

Overview

Instructional Simulations, Inc. (ISI) believes that student behavior is changed through "doing." They have used an approach to learning which involves specific learning tasks and performance goals. *Family Life Income Patterns* (*FLIP*) is centered around the task of budgeting for a family. Students encounter the problems of credit management, investment, and interest, in terms of family goals.

Materials and Cost

Materials Package:

Plastic-covered looseleaf notebook, 10½" x 11½" x 2½", contains the following:

Coordinator's Manual: 22 pp., 8½" x 11", durable cardboard, looseleaf; includes game description, learning and instructional objectives, list of concepts, directions for playing

Student Manual: 18 pp., 8½" x 11", stapled paper cover; includes list of materials needed, game description, directions for playing

Additional Materials: 30 each of 9" x 12" envelopes; envelopes each contain the following 8½" x 11" durable cardboard items: 1 family trait sheet, 1 profile of expenses sheet, 1 expense key, 1 unforeseen expense key, 1 purchase option sheet, 1 record sheet, 3 scoring and cash flow sheets, 1 ditto master for duplicating additional record sheets

Classroom set of 30 including Coordinator's Manual	$35.00
Additional family units for 30 students (each family)	$18.00

Required or Suggested Time

The game requires a minimum of three to four hours to play. More game time may be necessary, depending upon the speed of play. Since each student or team of students may work independently, the game can be stopped and restarted at any time.

Intended User Characteristics

FLIP requires a 9th-grade reading level. The student manual is written at the 9th-grade level and is programmed for self instruction. Elementary mathematical calculations are required and could become a major part of the learning task. No previous learning in economics is required for the instructor. This simulation game can be played in the average classroom; each student should be provided an individual desk or working space.

Rationale and General Objectives

The developers want the learner to encounter real life problems and to make realistic economic decisions in planning and implementing a family budget. According to ISI, their learning objectives include having participants recognize family characteristics which are most likely to affect the family economic condition; distinguish between fixed and variable expenses as they relate to overall budget development; relate the economic history of a family to its specific economic characteristics; develop and test ways to best meet expenses as a pattern of family expenses unfolds; and develop sensitivity to the value of assessing the individual's ability to control his family's economic situation.

Content

FLIP is a one or two person simulation game which treats family economic factors of budgeting, life style, credit management, payment schedules, investment programs, purchase options, and income management. The game is played for 12 periods; each period represents one month. One game session thus represents one year in the economic life of a family. Various family models are available; each model illustrates family size, income, education, occupation, residence, and related socio-economic variables as determinants of family income patterns. These models include the Jones family, with a yearly income of $10,000; the Smith family, with a yearly income of $15,000; the Clark family, with a yearly income of $12,000; and the Green family, with a yearly income of $5,700.

Procedures

Participants are introduced to concepts and terms which are necessary to play the game. Each student or team of two students assumes the role of the Jones family. Roles within the Jones family are rigidly prescribed. The family plays against the conditions which are prescribed. There is no competition among the players. The players work within the constraints of their simulated situation to achieve economic stability and effectively utilize resources. The element of chance is present through "unforeseen expenses" which can affect the players' best efforts to plan and budget wisely. Each family progresses at its own speed. The Smith, Clark, and Green family models are designed as supplements and are to be used at the discretion of the instructor and the students after the game has been played using the Jones family model. The teacher needs to be present during the course of the game to answer any questions which might arise.

Evaluative Comments and Suggestions

Because of the high reading level of the materials, the amount of mathematical calculations required, and the subject matter upon which the materials are based, *FLIP* is particularly suitable for academically-oriented students. There is no idle time, since each player proceeds at his own speed. The game can be played many times by the same students, since they will gain additional skill in making decisions each time it is played.

FARMING, THE GAME OF

Developer:	**High School Geography Project** **Association of American Geographers**
Publisher:	**The Macmillan Company** **School Division** **866 Third Avenue** **New York, New York 10022**
Publication Date:	**1969**
Availability:	**From publisher**
Grade Level:	**10 (7-12)**
Subject Area:	**American History, Economics, and Geography**
Number of Players:	**10-30**

Overview

Farming, an agricultural investment activity, was designed by the High School Geography Project as one part of the unit, *Manufacturing and Agriculture*. In this simulation game, pairs of students assume the role of a farmer in Settler County, western Kansas, in three separate historical periods: 1800-1882, 1919-1921, and 1933-1935. Based upon his role, each farmer must make yearly decisions as to how he will allocate his resources. Outcome cards provide annual data about how well each farmer has invested. It is learned that not all farmers are successful and that various forces such as weather, technology, and world affairs seriously affect agricultural production and profits. As the activity progresses through the three historic periods, it becomes more complex. Finally, it is learned that despite hard work and wise investment, many farmers are "wiped out" (lose their land) during the Depression years of the thirties.

Materials and Cost

Materials Package:

Index Card Box, 7" x 6" x 2½" contains the following:

15 role cards; 16 outcome cards for each of 9 years: 1880-1882, 1919-1921, and 1933-1935; 18 wipe-out cards for 1933-1935

Additional Materials: 1 envelope containing 3 activity sheets tablets (1880-1882, 1919-1921, 1933-1935); 2 base maps labeled "1880" and "1921"; 20 sheets of gummed colored paper

Total Package	$29.25
Coordinator's Manual: (from Unit II, *Manufacturing and Agriculture* in *Geography in an Urban Age*) 112 pp., 8½" x 10", paperbound; only pages 67-93 deal with the *Game of Farming*; includes major parts of the activity, planning guide, list of materials necessary to conduct game, educational objectives, evaluation, guidelines for conducting the game, teacher readings, and discussion suggestions	$ 1.20
Student Manual: 179 pp., 8½" x 10", paperbound; only pages 123-147 deal with the *Game of Farming*; includes student instructions, background and pictorial information, charts	$ 1.59
Additional Consumable Kits	$ 7.50

See Materials and Cost in High School Geography Project, *Geography in An Urban Age* Data Sheet.

Required or Suggested Time

Farming is planned to take four and one-half to six class periods. If accompanying reading materials are used, the recommended time is essential. However, it may be used without reading materials, though this reduces the possibilities of maximum educational gains. Debriefing activities are very important for *Farming*. Within the six recommended days, teachers should allow at least one class session for analysis of the activity and accompanying learning outcomes.

Intended User Characteristics

Farming was originally intended for use in 10th grade geography classes. It has been found useful in U. S. history and could be used in economics courses as well. Younger and older students can participate profitably in this simulation game. If the reading materials are used, students should possess at least average junior high school reading proficiencies. In addition, mathematical competencies of upper-elementary level are required. Teachers do not need special trianing in geography in order to conduct this activity properly.

Rationale and General Objectives

Learner objectives for *Farming* can be grouped under three general headings: knowledge, attitudes, and process. It is intended that students learn that biological and climatological processes pose economic hazards for the farmer; that national and international events seriously affect farmers' welfare; that interdependence, the market, and historic and environmental chance may be more instrumental in determining a farmer's success than hard work; and that cultural background as well as objective information affects decision making. *Farming* is further designed to help students read and interpret graphs and to apply such information to the decisions that must be made each year. The second category of objectives is concerned with attitude development. It is intended that students develop empathy for farmers' economic and social position in our society. Process outcomes make up the third set of objectives. Students must learn to work in pairs or small groups in order to analyze each year's outcome and to make decisions about planting, renting land, and interpreting data.

Content

Participants in *Farming* assume the role of settlers with varying cultural backgrounds. Attracted to Kansas by railroad advertisements, each farmer must invest his resources in order to earn a living for himself and his family. He quickly learns that the railroads misrepresented western Kansas and that he must depend on his own knowledge and experience if he is to survive. The first historic period, or "entry," covers the years from 1880 through 1882. During this time farmers first allocate resources in 1880 according to individual knowledge provided on the role cards. As they gain experience, they modify the allocations of their resources in 1881 and 1882. The second entry covers the years 1919-1921. American farm prices were inflated as a result of World War I. To meet increased foreign demands for food, farmers expanded their operations and utilized technology. When European farms became productive in 1920 and 1921, American farm prices were seriously reduced. As a result, many farmers in the game suffer some economic setbacks in this period. During this second entry, farmers have additional information, such as annual rainfall tables, yields, and market prices, which must be interpreted and applied to the decision-making situations. The third entry, which is optional, covers the years 1933-1935. Due to the economic depression and drought, many Kansas farmers are wiped out. Even though the farmers are hard-working and really wish to remain on their land, economic and natural forces beyond any individual's control force many to leave the land.

Procedures

Each pair of students is given a role card describing the background of the farmer the pair is representing. Students must decide the wisest allocations of resources, and record their decisions. After outcome cards have been distributed and the results calculated on the worksheets, the teacher and students try to analyze why certain outcomes occurred. Each of the three years of the entry is played in a similar manner. In entries two and three, additional information is provided for the farmers, and the processes of allocating resources and calculating results are repeated for each year. In the third entry, however, many farmers are faced with economic disaster, and the game is designed to make it very difficult to win.

Evaluative Comments and Suggestions

Farming is a relatively easy simulation game to use. Although *Farming* was designed to have students work in pairs, individuals or triads can assume one role and profit from participating in the activity. When engaged in the final stages of *Farming*, the teacher should take note of comments made by students, especially those who are faced with economic disaster. Such comments often prove valuable in the debriefing session. *Farming* has proven to be a very exciting simulation game for students, and with proper debriefing, it is an effective means of teaching information about agriculture in three historic periods.

References

Risinger, C. Frederick. "High School Geography Project," *Social Studies Materials Data Book*. Boulder, Colo.: Social Science Education Consortium Inc., 1971.

GENERATION GAP

Developers: Erling O. Schild and Sarane S. Boocock
Academic Games Associates, Inc.
Johns Hopkins University

Publisher: Western Publishing Company, Inc.
Education Division
850 Third Avenue
New York, New York 10022

Publication Date: 1969
Availability: From publisher
Grade Level: 6-9 (10-12)
Subject Area: Sociology, Human Relations
Number of Players: 6

Overview

Generation Gap is a simulation game which was designed by Erling O. Schild and Sarane S. Boocock of Academic Games Associates, Inc. at Johns Hopkins University. The game is intended for use primarily by upper-elementary grade students. Cognitive emphasis is minimal and only elementary reading and mathematics skills are required. It is intended that, through discussion techniques, students will acquire greater insight into problem-solving between parents and teenagers and will be able to more effectively solve problems in all of their interpersonal relationships.

Materials and Cost

Materials Package:

12" x 14" hardbound album contains the following:

Coordinator's Manual: 16 pp., 5½" x 8½", stapled paper cover; includes rationale, suggested schedule of play, rules, discussion questions for debriefing, variations of the game, suggestions for use with various subject areas

Additional Materials: 3 playing boards, 15 Issue Cards, 15 Issue Covers, 30 Satisfaction Cards, 45 alphabetical letters (15 A's, 15 O's, 15 B's), 1 pad of score sheets

Total Package $15.00

Required or Suggested Time

This simulation game can be easily played in a typical school class period. The first round of play normally takes 15-20 minutes. Subsequent rounds take approximately ten minutes each.

Intended User Characteristics

Minimal reading and mathematics skills are required in playing this game. The game is particularly suited for average-ability upper elementary students; modifications of the game may make it appropriate for both older and younger students. Teachers need no special training to implement the game; students need no advance preparation. The game area needs only to provide means for students to sit in pairs facing each other.

Rationale and General Objectives

This game was designed to provide students with experience in solving everyday problems which arise between parents and teenagers. It is intended that students will gain additional communication skills, as well as increased appreciation for the complexities and difficulties faced by both parents and teens in solving mutual problems. Sarane S. Boocock states in the Foreword to the Coordinator's Manual that "one might predict that the game experience in *Generation Gap*, combined with thoughtful discussions, will produce greater self-confidence and mastery of skills which will in turn lead players to be more sensible and sensitive in their personal conflicts with others."

Content

Five issues confront each parent and teenager. Will the teenager do all of his homework during the week? Will he stay home Saturday night? Will he get his hair cut (or, if a girl, wear makeup) during the week? Will he go to a show and be home by 10 o'clock P.M.? Will he spend most of the weekend working around the house? Each pair of participants is supposed to resolve the conflicts posed by these issues. The pair is to work conscientiously to solve each problem, employing whatever communication skills which can be devised in conversation. The content of the game rests on the success of the dialogue between each pair of students and on debriefing which can greatly augment both cognitive and affective content. The Coordinator's Manual provides a list of questions to use in debriefing.

Procedures

Each pair of participants sits at a table; the parent and the teenager sit opposite each other with the game board between. Both participants randomly order five game point cards. These point cards indicate how many "satisfaction points" each participant could gain in solving a problem. Five issue cards are placed in the center of the board, corresponding randomly to the five point cards held by both the parent and the teenager. Each issue is discussed. Scores are determined for each issue depending on whether or not the parent and teenager have reached agreement as to how to solve the problem posed on the issue card and depending on who was "satisfied" by whatever decision was made. Teenagers are allowed to disobey parents. If a teenager has disobeyed his parent or has broken a promise he has made to his parent, the parent may punish the teenager by subtracting up to seven points from the teenager's score. At the end of the game, the parent and the teenager with the highest number of satisfaction points are identified as the winners.

Evaluative Comments and Suggestions

This is not a complex game. It can be used effectively with grade school students because the issues to be discussed are more germane to that age group. Older students will find the issues much less meaningful; however, modifications of the game, e.g., dialogue based on issues of concern to the participants, will increase the effectiveness of the game with a wider range of students. The game may also be modified to illustrate interpersonal relationships other than those between parents and teenagers; the discussion techniques used in solving problems could be based on issues of concern to teachers and students, employers and employees, Congressmen and constituents, etc.

GHETTO

Developer: Dove Toll
Academic Games Associates, Inc.
Johns Hopkins University
Publisher: Western Publishing Company, Inc.
Education Division
850 Third Avenue
New York, New York 10022
Publication Date: 1969
Availability: From publisher
Grade Level: 10-12 (7-9) (Adults)
Subject Area: Sociology, Contemporary Problems
Number of Players: 10-20

Overview

Developed at Johns Hopkins University by Academic Games Associates, Inc., the simulation game *Ghetto* was designed for middle and higher socio-economic class students of junior high age and above. Few of these students ever have any encounter with urban poverty. This simulation game is designed to simulate the emotional, physical, economic, social, and other pressures that urban poor encounter as they seek to improve their lives.

Materials and Cost

Materials Package:
- Cardboard box, 19" x 9" x 2", contains the following:
- Coordinator's Manual: 24 pp., 8½" x 11", stapled paper cover; includes nature and aspects of the game, discussion questions for use in debriefing, further reading and films available for purchase and rental
- Additional Materials: 1 vinyl game sheet (board), 30" x 32"; 1 pair of dice; wooden block markers; 1 spinner; 10 profile folders; a summary of neighborhood conditions; record sheets for time allocation record and reward calculation; work, school, and hustling chance cards; victim cards; ~~and~~ color-coded player chips
- Total Package $24.00

Required or Suggested Time

The game can take up to four hours of class time. This time period includes introduction to the game, playing time, and debriefing. Initially, the game will move slowly as the players must learn the rules, make time allocations, and calculate possible outcomes of their decisions in playing the game. After the first few rounds (each round equivalent to one year of the players' lives), the game moves rapidly. When the coordinator (teacher) decides to introduce the "neighborhood conditions" portion of the game, play will slow somewhat but will pick up rapidly as students become accustomed to the additional complexity. Ten rounds (years) constitute one game.

Intended User Characteristics

Game players should be able to follow rules and directions, do a minimum amount of addition and subtraction, and do the required reading which follows the game. These requirements may pose problems for some junior high school students. Senior high school students and adults should have no problems with *Ghetto*. Teacher preparation is necessary prior to playing the game. It is also helpful if the teacher has planned the debriefing well and has prepared some student work to follow the game.

Although a fairly large table is useful for successful playing of the game, it can be played on the floor of a classroom as long as the students have a place to keep their records and profile folders.

Players tend to become noisy during the game, particularly if the teacher is conducting two games simultaneously with the class. The noise factor should be a consideration when choosing a location for playing the game.

Rationale and General Objectives

Poverty in the United States affects millions of people, particularly those who live in cities. Most individuals in middle and higher socio-economic classes have little empathy for or first hand experience with ghetto life.

In the forward to the Coordinator's Manual, the author states that "the game of *Ghetto* was designed to give more privileged Americans a small taste of some of the pressures that work on the poor of an inner city neighborhood." Upon completion of the game, participants should be able to effectively respond to and comprehend the problems of the urban poor. It is hoped that each participant, after playing the game, will develop a greater willingness to seek additional information about a variety of urban problems.

Content

Ghetto draws upon many of the social science disciplines for game content. For example, from economics, students learn about problems of urban and minority unemployment; from sociology, players begin to see the difficulty of family unit maintenance; and, from political science, the power of community action is exemplified. Many other concepts from these and other social sciences are inherent in the game.

The student gains minimal knowledge of many of these concepts in the gaming process. It is up to the teacher to use the game in the way he sees fit to pursue one or more of these areas of inquiry.

Procedures

Depending upon class size and the number of *Ghetto* games used, students can either play *Ghetto* in pairs or individually. Each student assumes the role of an individual who lives in a ghetto neighborhood. Four male and six female roles are assigned. Each profile folder defines the player's age, educational status, marital and family situation, sources of income, and rules he is to follow. It is worthwhile to have the players introduce themselves (in their roles) to each other. This will help to generate a community feeling as the game begins.

Players are assigned color coded "hour chips". Within the rules given them and the rules of the game, players can decide to allocate their time (hour chips) among a variety of activities in their community—school, work, hustling, relaxation and recreation, and welfare. Players are given different numbers of chips depending on the time they might typically devote to the activities. In allocating their chips, players are asked to follow the objectives stated in the Coordinator's Manual: 1) get as many reward points as you can during the rounds of play, and 2) improve your earning power for the future. It is necessary to carefully explain the data sheet, scoring procedure, and chip allocation used with the game board (sheet). To get the game underway in good order, it is wise to clearly explain the rules and then go ahead with the first round (year) of play. Questions will come up that can be answered more effectively as the game is being played.

Interaction among the players should be allowed to take place. To some extent players will influence each other in the decision-making process. However, no amount of player interaction in the initial stages of the game can influence the outcomes of their decisions. Outcomes are based more upon chance, reflecting the reality of ghetto life, than player skill. To some degree decisions made collectively by the players can change outcomes. After the game is underway, players can act to improve neighborhood conditions, i.e., housing, education, recreation, and safety. The success of their collective endeavors depends to some degree on chance just as in real life. However, improvement in neighborhood conditions will have some effect on the way time is spent in other activities.

Competition in *Ghetto* can be minimized. There is really no winner or loser. However, the Coordinator's Manual suggests having players with similar roles compare their scores at the completion of the game and identifies roles which may be usefully compared.

The game is fairly tightly structured, but can be altered. Alterations should not be made until it is determined that all players are well into playing the game as it is designed.

Evaluative Comments and Suggestions

Few evaluative data are available. During the 1969-70 Experienced Teacher Fellowship Program at the University of Colorado, the game was used with mixed success in a racially integrated junior high school class in Denver, Colorado. The Social Science Education Consortium staff has used *Ghetto* successfully to introduce both inservice and preservice teachers to simulation games. Unless a teacher is very skilled in working with ghetto youth, it is not recommended that the game be used in core city schools.

GRAND STRATEGY

Developer:	**Abt Associates, Inc.**
Publisher:	**Abt Associates, Inc.** **55 Wheeler Street** **Cambridge, Massachusetts 02138**
Publication Date:	**1970**
Availability:	**From publisher**
Grade Level:	**10-12 (7-9)**
Subject Area:	**International Relations**
Number of Players:	**10-30**

Overview

Grand Strategy was originally developed in 1965 for demonstration use in teacher training workshops. It was devised to provide an example of how simulation techniques can be effectively applied to a specific historical period. It is a simulation game which explores the political, diplomatic, and military exchange between ten western countries during World War I.

Materials and Cost

Materials Package:
- 8½" x 11" manila envelope contains the following:
- Coordinator's Manual: 8 pp., 8½" x 11", stapled paper cover
- Additional Materials: 1 overhead transparency map; 30 scenarios describing the historical setting; 30 different one-page role profiles; and 30 blank adhesive name labels
- No student guide or evaluative instruments are provided.

Total Package	$25.00

Required or Suggested Time

Actual playing time requires one to two hours.

Intended User Characteristics

The game is played most conveniently in a large room with a conference table, 30 chairs, a white screen for map projection, and an overhead projector. Arithmetic skills require simple addition; most of the computation is done by the teacher. Little reading time is demanded, but the suggested reading is essential for the smooth operation of the game. The game was developed to provide for the average junior high school student as well as the slow learner who shows little interest in developing reading skills. The teacher should have a basic understanding of the historical background of World War I; this will be useful in debriefing the students.

Rationale and General Objectives

Although *Grand Strategy* illustrates the historical interaction of the major European powers during World War I, the primary purpose of the game is to facilitate students' comprehension of the various relations between countries, e.g., coalitions, clandestine agreements, alliances, treaties, open warfare, etc. Therefore, the game is not strictly restricted to having the students acquire a basic understanding of the historical period, but has the participants experiencing processes of international diplomacy.

Content

Grand Strategy explores the international relations between European nations during the First World War. European political systems of the era are recreated. Participants assume roles of national leaders who strive to achieve political objectives for their representative countries with as little economic and political cost as possible. Military interaction is simulated with land and naval battles diagrammed on a European continent transparency. Avoidance of World War I depends upon the effectiveness with which the students assume the roles of politicians and on the effects of the interaction which occurs as the game is played.

Procedures

Participants are appointed to nation teams and receive national leader profiles which correlate to actual historical data, e.g., President Wilson operates within a framework which attempts to achieve world peace, end the war quickly, and establish democracy in the newly created nations. Classroom lights are turned down, scenes are read aloud, and the European map transparency is projected. Next, a bulletin about the Serbian crisis is read to the participants. From this point, nation teams must act according to their own interests, ideological background, perceived military strength, and contracted allies. Foreign ministers are free to travel and meet with other teams, while Chiefs of State and Defense Ministers must remain seated. Representatives from nation teams may leave the room for two-minute periods. Participants direct the teacher to move battalions and navies to engage in battles; the teacher tabulates outcomes based on military strengths tables. Each simulated year represents approximately ten minutes of game playing time. Victory in the overall war requires a two to one ratio of military strength superiority. If the war slows down, participants may choose to establish a peace conference. The overall winner of the game is the nation team which achieves its political objectives with the least loss of military strength.

Evaluative Comments and Suggestions

The Coordinator's Manual in many instances could be more specific in explaining gaming procedures, especially with respect to the following: 1) the naval battles; 2) the lack of charted score sheets and student guides; 3) the defeat of nations in battles; and 4) the number of moves participants can make in one year of playing time. The success of *Grand Strategy* greatly depends upon teacher initiative to fill in the nonspecified gaming procedures as well as to encourage the participants to understand the relationships between the game and the historical period and political concepts being studied.

HANG UP

Developers: Synectics Education Systems and the Unitarian Universalist Association

Publisher: Synectics Education Systems
121 Brattle Street
Cambridge, Massachusetts 02138

Publication Date: 1969

Availability: From publisher

Grade Level: 6-12 (Adults)

Subject Area: Human Relations, Psychology, and Sociology

Number of Players: 6 (2-As many as desired)

Overview

This game has been designed to focus attention on racial "hang ups." In playing the game, each participant is given a number of hang ups which he must then try to rid himself of during the game. As he moves around the game board and encounters various stress situations, he tries to pantomime his hang ups successfully. The other participants try to identify correctly each hang up being demonstrated. Both the student whose hang up is guessed and the student who correctly identifies the hang up may discard a hang up card. The winner is the first player to pass the finish line without any hang ups. The game has been used successfully with 6th-grade students through adults. It requires little teacher preparation but considerable tact and sensitivity throughout the game play and in the debriefing.

Materials and Cost

Materials Package:

Cardboard cylinder, 14" x 4", contains the following:

Coordinator's Manual: 9 pp., 6¼" x 8", stapled paper cover; includes introduction, procedures, suggestions for modification, and rationale

Additional Materials: 57 blue Hang Up Cards; 37 tan Stress Situation Cards on a ring; 23 red Wild Cards; 23 yellow Wild Cards; Tiles, one of each of the following colors: yellow, blue, maroon, turquoise, violet, green; plastic playing board; 6 Clue Lists; 2 dice; 12 blank yellow Wild Cards; 11 blank red Wild Cards; 17 blank blue Hang Up Cards; 18 blank tan Stress Situation Cards

Total Package $15.00

Required or Suggested Time

A minimum of two hours is necessary to play this game, including briefing and debriefing activities.

Intended User Characteristics

Participants need only elementary arithmetic and reading skills to play this game. The teacher does not have to spend much time in preparing to play the game; however, success in debriefing depends upon the teacher's ability to assist students in gaining real insight into their own game behavior.

Rationale and General Objectives

The purpose of this game is to focus attention on racial attitudes and stereotypic thinking. The developers' rationale in designing this game is based on Gordon Allport's studies in his book, *The Nature of Prejudice*. Allport's findings indicate that people who have a highly developed empathy for other human beings tend to be more tolerant, to be less prejudiced, and to have greater self-insight. Therefore, *Hang Up* has been designed to stimulate empathetic awareness in students through a process of charading stressful and comical situations based on race relations. The developers believe that through a process of charade and analysis, participants' sensitivity to their own and to others' racial attitudes and prejudices will be heightened. It is intended that each actor will generate, within himself and the other participants, a feeling for and understanding of the situation he is portraying. When each participant tries to pantomime a hang up in a stress situation, he frequently and unconsciously reveals latent racist strains which can then be analyzed in the debriefing process.

Content

In the process of this game, students are involved in trying to identify themselves with situations that they may never have experienced in real life. They are required to analyze how certain types of people might feel and react in specific circumstances. Most of these situations involve hypothetical interaction between people of different racial derivations. As the student tries to role play various stressful situations, he invariably projects some of his own attitudes and feelings. A participant can be given a hang up card that says, "You are the type of person who tries to hide your low opinion of yourself by using a false front of superiority," while at the same time, "Your black friend is beginning to prefer being with other blacks." He has already rolled the dice to discover that he himself is white. Students reveal their own attitudes and feelings not only in the role play but also by the hang up cards they choose to discard when they have the opportunity to discard those of their choice

The value of the game for students' cognitive and affective growth lies in its potential for analysis of both implicit and explicit prejudices in ways that maximize students' emotional and instructional involvement in the analysis. Skills in self-expression, verbal, and non-verbal communication can also be heightened in game play. *Hang Up* is also designed so that students can provide their own input by creating their own role-play situations.

Procedures

Each player is dealt seven hang up cards. As he moves around the game board, he lands on different numbered squares, each number representing a specific stress situation. If any of the hang up cards in his hand fit the stress situation on which he lands, he checks the dice to see if he is a black man or a white man (even number black; odd number white). If the player's race eliminates the stress aspect of the situation, he then picks two wild cards and acts them out. One card is an adjective; the other is a noun (e.g., rich, clown). If his acting out of the wild cards is correctly identified, he can discard one hang up card of his choice; if it is not identified, he must draw another hang up card. If the player's race does not eliminate the stress situation, he goes ahead without selecting wild cards and acts out his hang up, taking into consideration the participant's race and his situation. All participants have a printed sheet that lists all possible hang ups. The other players then try to identify which hang up the student is acting out. Each player, however, has only one guess. If another player correctly identifies his hang up, the student has a chance to discard that hang up card and the person who identified it may discard any hang up card in his hand. If the hang up is not identified, the participant who played the role must discard that particular hang up and draw two new ones. The player may, if he wishes, pass up his opportunity to act out a hang up card and wait instead for his next turn. The first player to pass the finish line on the game board without any of his hangs ups is the winner.

Evaluative Comments and Suggestions

The developers state in the Coordinator's Manual that "this game has been tested with blacks and whites and adults and young people. It has proved successful both in terms of fun and of learning. . . . The game is designed for players to substitute their own relevant concerns for the ones proposed by the game." This can be an exciting and effective game. Some of the pantomime, however, is difficult; for example, it is not always easy to act out a concept like "self-contained aggression." As a result, it is helpful if the game coordinator immediately makes the rule that words cannot be spelled out by letters in the air. It is also helpful to have the participants keep their hang up cards hidden from sight; sometimes players guess a person's hang up incorrectly on purpose, just so the game doesn't end. The game is effective and adaptable for use at a wide range of age and maturity levels. One conspicuous weakness is the fact that the Manual does not provide any assistance or suggestions for debriefing. The developers do, however, furnish a phone number in the Coordinator's Manual and tell anyone who has questions about the game to call them collect!

HARD ROCK MINE STRIKE

Developers:	**Russ Durham and Virginia Durham** **Teaching Research** **Oregon State System of Higher Education**
Publisher:	**Random House, Inc.** **Westminster, Maryland 21157**
Publication Date:	**1970**
Availability:	**From publisher**
Grade Level:	**7-12 (Adults)**
Subject Area:	**American History, Labor Relations, and Political Science**
Number of Players:	**11-35**

Overview

Developed under the Simulation Systems Program at Teaching Research, Oregon State System of Higher Education, with the consultation of Dr. Paul Twelker, *Hard Rock Mine Strike* was designed to reflect various historical forces behind the labor-management conflict during the late 19th century. Players assuming the roles of coal miners threaten to strike for increased pay and better living conditions while management threatens the use of federal troops, yellow dog contracts, and other tactics to resist higher costs which are already causing corporate losses. The game package includes role descriptions, student objectives, transparencies, game-action flow charts, and suggested follow-up activities, and is well-suited for use with junior and senior high school students.

Materials and Cost

Materials Package:

Cardboard box, 12¼" x 12¼" x 2¾", contains the following:

Coordinator's Manual: 38 pp., 6" x 9", stapled paper cover; includes rationale, student objectives, rules for the game, action flow charts, role descriptions, and suggested follow-up activities with discussion questions

Additional Materials: 35 student role cards; 20 chance cards; 80 coal cards; 80 food cards; 3 flow of action charts; 40 whiskey cards; 20 Christmas baskets; 6 transparencies; 2 U. S. Federal Court Injunctions; Record of Miner's Standard of Living; 1 Bookkeepers Payroll Sheet; 1 set of agendas, operation forms, projected income and profit graphs, and name tags

Total Package	$35.00

Required or Suggested Time

The game can be played in one to two 50-minute classroom periods if participants have been briefed the previous day. Suggested post-game discussion and pre-game research into the historical background of the game will require additional time, at the discretion of the teacher and students.

Intended User Characteristics

A 7th-grade reading level and simple addition and subtraction skills are required. No previous knowledge of subject matter is mandatory for successful playing of the game. However, suggested research into the historical background of the game setting before play begins would be beneficial. The Coordinator's Manual provides personality and study skill ability guidelines for the various game roles. The classroom should be large enough to allow for groupings of tables and chairs into five distinct areas and to allow for considerable student movement.

Rationale and General Objectives

Hard Rock Mine Strike was designed to illustrate the dynamic and explosive relationships that existed between workers and management during the late 19th century. The authors have written 25 of what they refer to as behavioral objectives as possible student outcomes at the conclusion of the game. Two of the most important objectives are that students will: 1) define the power motive that was the base of the labor-management conflict; and 2) state reasons to support the position that conflicts between labor and management were inevitable. The developers state, however, "It should be noted that the objectives you (teacher) decide to emphasize may depend on the amount of time you wish to give to the subjects and the concepts you feel are relevant."

Content

Hard Rock is a small mining community centered in a coal region situated 100 miles from the nearest town. Hard Rock is completely controlled by the president of Hard Rock Mining Company, who owns the company store, the saloon, the miners' houses, and pays the local sheriff. In the early winter of 1893, the community is experiencing a depression. Coal prices are down and the mine is beginning to operate at a loss. The 2,000 miners who are completely dependent on the mine are pressing for higher wages, better living conditions, and fewer hours of work. *Hard Rock Mine Strike* simulates tensions as they grow between management and workers. Both groups use all the resources at their disposal (e.g., yellow dog contracts, strikes, federal court injunctions, scabs) to achieve their desired goals. Through negotiations and meetings, both sides have the options of settling differences (primarily to the advantage of management) or dissolving the game.

Procedures

After the teacher has briefed students about the historical background of the community of Hard Rock and discussed the upcoming uses of the confrontation, participants select roles and the room is arranged into designated areas. Actually, the Coordinator's Manual suggests that the teacher, rather than the students, select participants to play each role. The game continues in 13 phases, each lasting five to ten minutes. In phases one through five, miners and management receive wages, purchase goods at the company store, receive notices of impending hardship, and discuss in separate groups possible courses of action to take to resolve their problems. In phases six through thirteen, union and management leaders engage in negotiations to discuss union demands; however, management remains adamant on almost all issues. In the last phases, workers become more persistent as management seeks alternative actions to stop confrontation (federal injunctions, threat of troops, etc.). As the game proceeds in the last phases, both sides have wider alternatives for action, thus allowing for negotiation or dissolvement of the game. The game ends when 1) miners return to work with yellow dog contracts, 2) all strikers are fired, 3) both sides reach satisfactory compromises, or 4) the coordinator calls an end to the activity. There is no winner or loser.

Evaluative Comments and Suggestions

Since there is no possibility of earning points or winning, players are not compelled by a win-lose motivation to take realistic actions in each successive phase. The roles of the miners are not as comprehensively defined as the various management roles. Research of 19th century labor-management conflicts prior to the game's beginning plus careful management of the game by the umpire and other key participants will help to prevent dysfunctional lack of involvement on the part of students. The Coordinator's Manual does include a lengthy list of questions for use in debriefing and a number of suggestions for follow-up activities.

HAT IN THE RING: THE PRESIDENTIAL NOMINATING GAME

Developers:	**Paul A. Theis and Donald M. Zahn**
Publisher:	**The Kiplinger Washington Editors, Inc.** **1729 H Street, N.W.** **Washington, D.C. 20006**
Publication Date:	**1971**
Availability:	**From publisher**
Grade Level:	**9-12 (5-8) (Adults)**
Subject Area:	**Political Science**
Number of Players:	**3-26**

Overview

Hat in the Ring was developed as part of a political science mini-course entitled *Politics '72*. The course was designed for use in grades 9 through 12, but the simulation can be implemented in upper elementary and junior high classes as well. The game is designed to acquaint students with all aspects of the presidential nomination process from the primary through the convention.

Materials and Cost

Materials Package:

Cardboard box, 13" x 10" x 2", contains the following:

Games Rules: 5 pp., 5½" x 8½"; 8 copies; includes game objectives and rules for play

Additional Materials: 1 vinyl game sheet (board) 38" x 25" (a map of the United States); plastic markers as follows: 8 candidate markers; 1 National Convention site marker; 130 delegate markers; paper play money; 3 decks of cards for use in primary states, non-primary states, and the convention

Total Package	$9.95

Required or Suggested Time

The developers do not recommend a specific amount of time for playing *Hat in the Ring*. The analyst suggests a total of five one hour sessions: one for introducing and beginning the game, two for conducting the primaries, one for holding the convention, and a final session for debriefing. This game may take longer if the players become involved in strategies and bargaining, or be shorter if one player enters the convention with the required number of delegates to win the nomination.

Intended User Characteristics

Hat in the Ring was designed for use by high school students as part of a mini-course on the 1972 election. It has been field-tested with 4th graders through adults. The field tests indicated that 5th graders can play the game with some degree of understanding, but that maximum results come when played by students in 9th grade and above. The game coordinator needs no special training in political science, but should play the game before attempting to use it in class. A table large enough to hold the game board (38" x 25") is required. Space should allow for freedom of movement, particularly during the convention, as players may need to bargain in private.

Rationale and General Objectives

The developers believe that a presidential candidate's struggle for his party's nomination is often more exciting than the actual election. In their effort to win the party nomination, students will learn the various phases of the nominating procedure from the primaries to the convention. They will also become aware of the various aspects of gaining delegates in non-primary states. Besides the major game objective of winning the nomination for President, students are expected to: 1) plan their campaign strategy and conduct their own campaign; 2) decide whether to enter primaries; 3) devise a strategy for running a high or low budget campaign; 4) raise campaign funds; and 5) bargain with other candidates for convention delegates to secure the nomination.

Content

Seeking the nomination for President of the United States involves learning about various political realities. These realities include knowledge about such things as the relationship between money spent and support gained; the relative payoff of seeking delegates from a few large states or many small states; the difference in cost and energy in gaining votes in a primary versus a non-primary state; and the importance of making political deals during the convention.

Procedures

Three to eight players assume the roles of presidential candidates. In order to accommodate a larger group each player may have a campaign manager to help him devise strategies and a treasurer to manage campaign finances. Two other suggested roles are a banker who pays money to the candidates and receives money from them, and a tally clerk who keeps track of the candidates' delegate strength. Although as many as 24 can play with one game, the developers suggest the use of two games with larger groups.

Each candidate receives $100,000 from the bank to begin his campaign. Delegate markers are placed on each state, with each marker representing ten delegates. Delegates are apportioned to each state according to population. Each candidate then draws a card to determine his home state. He automatically wins that state's delegates. The tally clerk draws a card to determine the convention site and puts an appropriate marker there.

Following these preliminary steps *Hat in the Ring* is conducted in two stages: the campaign and the convention. The first stage involves winning as many delegates as possible before the national convention. Candidates may choose to enter primaries, to campaign in non-primary states, or a combination of both. They may also choose to drop campaign activities during a round to concentrate on fund-raising. After the candidates make their choice for the first round, play begins with the player whose state comes first in alphabetical order. He must announce what he will do that round and what type of campaign he will run. In both primary and non-primary states he may choose an economy campaign, which is the least costly but is also likely to gain fewest delegates; a full-scale campaign, which will gain more delegates but costs more; or a blitz campaign which is the most costly but will gain the most delegates. After announcing his decision, the candidate draws either a primary or non-primary card and follows the instruction. For example, an economy campaign in a primary might say: "Newspaper ad campaign wins ten delegates. Cost $10,000." As a candidate wins delegates he takes the corresponding markers for that state from the board. When all delegates from a primary state have been won, the next primary begins. Primaries begin with New Hampshire and proceed through all states which utilize this form of delegate selection. The South Dakota primary marks the end of the campaign stage of the game.

All candidates then proceed to the convention site, taking their delegates. Any delegates remaining in non-primary states are taken to the convention site and declared uncommitted. The first ballot is taken, and if any candidate has 660 delegates the game is concluded. If not, the candidates develop a campaign strategy and the game proceeds. They may choose to caucus, to demonstrate, or to entertain in order to gain delegates. Candidates may make political deals such as offering their delegates and money to another candidate in return for the vice-presidential nomination. The first candidate to aggregate 660 delegates wins the nomination and the game.

Evaluative Comments and Suggestions

Although nomination procedures have been simplified in this game to make it go more smoothly, students can gain valuable insights into the nominating process. The intricate distribution of votes among delegates and the strong influence of individual states are not built into the game nor are there "winner-take-all" primaries. The teacher may, therefore, want to explore these realities with the class.

INFLUENCE

Developer:	**Judith A. Gillespie** **Social Studies Development Center** **Indiana University**
Publisher:	**Ginn and Company** **191 Spring Street** **Lexington, Massachusetts 02173**
Publication Date:	**1972**
Availability:	**From publisher**
Grade Level:	**9-12 (13-14)**
Subject Area:	**Political Science**
Number of Players:	**21-51**

Overview

Influence is a highly structured simulation game designed to explore two basic questions about policy making: "1) Who is influential? and 2) How is influence exercised in different political situations?" Although developed as a part of the *American Political Behavior* course, it can be adapted for use with other curricula. Participants assume the roles of such official decision-makers as the President, Congressmen, and Federal Bureaucrats; and of such unofficial opinion makers as interest-group leaders, media representatives, and experts from political science, economics, and industry. "Players work together to make national policy on the issues of domestic welfare, foreign affairs, and congressional reform. In the process of working together, players can see the different influence relationships which develop as democratic governments make policy."

Materials and Cost

Materials Package:

Heavy paper envelope, 9½" x 12½", contains the following:

Coordinator's Manual: 44 pp., 8½" x 11", stapled paper cover; includes introduction, overview, objectives, suggested procedures for game play, complete list of roles, tables for gathering data for discussion, identification cards, 35 perforated role cards

Student Manual: 4 pp., 8½" x 11", paper sheets; includes player objectives, policy issue statements, role information, political conditions, activities, debriefing information, and playing schedule: 3 per package

Additional Materials: Four duplicating masters, 8½" x 11", containing the following: Influence Score Sheet, Influence Card, Policy Opinion Poll, and Political Event Sheet

Total Package $6.33

Required or Suggested Time

The game design of *Influence* provides for three days of play and one day of debriefing. The developer emphasizes that the game has been carefully structured to insure that the generalizations which the students will be expected to make as the result of playing are coherent and consistent with sound political science research. It is necessary, therefore, to adhere carefully to the systematic development of the game.

Intended User Characteristics

Influence was designed for students in grades 9 through 12, and can be used most profitably as a summary activity after students have studied about Congress and the Executive. The game might possibly be difficult for less able readers; however, the teacher could overcome this by prefacing the activity with a discussion of the information contained in the Participant's Guide. There is also no reason why the game could not be fruitfully used in junior college or undergraduate collegiate courses. The game can be conducted in a regular classroom with space set aside for Executive activities, one part for Congressional activities, and one part for the media and interest groups.

Rationale and General Objectives

Influence seeks to lead students to understanding of political behavior by providing information and data which students can analyze and from which they can make generalizations. General objectives for the game are: "1) Students can identify influence relationships between official political decision-makers and unofficial political specialists. 2) Students can see how political influence is exercised in three different kinds of political situations: consensus of opinion, coalition of different opinions, or conflicts of opinion. 3) Students can state the following relationships between political conditions and the exercise of political influence: (a) Under conditions of consensus of opinion, official political decision-makers tend to make policies without considering the alternatives offered by lobbyists, experts, and media representatives. They tend to make policies through compromise agreed upon by most official participants. (b) Under conditions of coalition of different opinions, official political decision-makers tend to seek support from lobbyists, experts, and media representatives who agree with their own opinions. They tend to make policies through rule by the largest coalitions, and minority groups continue to voice strong opposition to their decisions. (c) Under conditions of conflict of opinion, official political decision-makers tend to make policies which express minority opinions or not to make policies at all. 4) Students can state various arguments on three major national policy issues—the war in Vietnam, welfare policy, and the seniority system in Congress."

Content

Players in the game make policy on three major issues—domestic welfare, foreign policy, and congressional reform. Three basic policy positions outlined on individual role cards are possible in the area of domestic welfare. The extent of American involvement in Vietnam provides the focus for another set of policy discussions and the seniority system in Congress is the third policy matter with which the players must grapple. The kind of decision which is finally made, the way in which it is made, and the strategies employed by the policy makers are dependent upon the types of political conditions prevailing during the decision-making period. Two types of political conditions are included in the game format. The first involves the amount of consensus or conflict about the various issues. The second type are the "events" such as Supreme Court rulings suggesting the possible unconstitutionality of proposed policies or mass public opinion pressures. As in reality, the participants must respond and make appropriate allowances for these pressures.

Procedures

The Coordinator's Manual carefully outlines the procedures and steps which will make *Influence* a meaningful learning activity. It also suggests the way the game, which was designed for 35 students, can be altered to be useful in smaller or larger classes. Following the introduction by the teacher, during which the players' objectives, background information, and the various kinds of player activity are explained and discussed, the game play can begin. The President holds meetings, writes legislative proposals, holds news conferences, and aggregates support for his policies. Legislators conduct committee meetings and hearings, prepare policy statements, bargain, and vote. Bureaucrats report to the President, gather data from the experts, and testify at hearings. Media representatives collect information and take editorial positions. Interest group representatives hold meetings and bargain. On the second day the first of the Event Cards are distributed to the proper players. A poll of public opinion by the media representatives culminates the game.

At the end of each day's session the teacher collects the Influence Cards. These provide the data base necessary for carrying out the final debriefing session. It is suggested that during debriefing the class be divided into three groups, each of which includes as many different roles as possible. Each group analyzes an issue and answers a number of questions. The findings are reported to the class to provide the basis for a general class discussion.

Evaluative Comments and Suggestions

It is especially important to follow exactly the procedures outlined in the students' and coordinator's manuals. The developers have carefully structured the game to bring about understanding of one aspect of political reality. They state that: "Too often simulations are totally dependent upon chance classroom developments for their success or failure. Thus structuring is designed to control behavior and emphasize the learning process in a systematic rather than random way."

INNER-CITY PLANNING

Developers: Stephen J. Fischer and Raymond A. Montgomery, Jr.
Creative Studies, Inc.
Publisher: The Macmillan Company
866 Third Avenue
New York, New York 10022
Publication Date: 1971
Availability: From publisher
Grade Level: 9-12
Subject Area: Political Science, Sociology, and Contemporary Urban Problems
Number of Players: 12-40

Overview

Inner-City Planning is a simulation game designed to give students insights into the problems of contemporary planning in the inner-city. Students assume roles of various figures involved in the real-life situation of planning improvements in an urban setting. As members of six special interest groups, the students attempt to influence the city planning authority in its decisions. Group interaction plays an important role in the successful use of this simulation game and contributes particularly to affective learning.

Materials and Cost

Materials Package:
- Cardboard box, 9" x 11½" x 1½", contains the following:
- Coordinator's Manual: 13 pp., 8½" x 11", stapled paper cover; contains description, objectives, game procedures, bibliography
- Student Manual: 20 pp., 8½" x 11", stapled paper cover; contains instructions, sequence of play, background on urban renewal, building costs, site map
- Additional Materials: 40 role cards, 7 working site maps, 1 class site map

Total Package	$16.80
Additional Coordinator's Manual	$ .30
Additional Student Manual (set of 10)	$ 8.03

Required or Suggested Time

These materials were designed for use in six class periods of approximately 40 minutes each. However, the teacher may easily adapt the game based on the length and schedule of class periods in his school and the extent of argument and discussion generated by the class in playing the game.

Intended User Characteristics

Participants need only enough reading ability to understand their roles. The teacher should be certain that the students understand the game instructions and background information. It is useful if the teacher distributes the game materials as much as a few days before the game is to begin. It is then useful if the teacher devotes some class sessions to a discussion of these game materials to get students immersed in the background and purpose of the simulation. The use of two or three separate rooms for the six groups is desirable and reduces group distraction. A large playing area should also be available to accommodate large group meetings of all players. The teacher should participate actively in the game, encouraging discussion and pointing up important issues.

Rationale and General Objectives

The developers of *Inner-City Planning* believe that having students play the roles of figures involved in the real-life situation of planning urban improvements will provide students with an understanding of some of the causes of urban decay, will expose them to processes involved in attempts to solve urban problems, and will give them an understanding of several diverse points of view involved in efforts to improve urban life. General objectives are aimed at having each of the participants gain a greater understanding of the complexities of the contemporary urban dilemma, and in the process acquiring skills in communication and problem-solving. The developers state that students should see *Inner-City Planning* "not simply as a means of conveying information but as an opportunity to engage in the processes and human conflicts that arise when planning the improvement of an urban area."

Content

Six interest groups, representing a municipal planning authority, a public housing agency, community representatives, educators, businessmen, and medical professionals interact in order to effect urban improvements without impairing the environments of citizens living in the area. These interest groups attempt to determine the environmental conditions which are most likely to enhance the lives of the citizens who live in the target area. The different interest groups devise strategies to influence the municipal planning authority through negotiation and compromise as they try to develop a plan to improve the section of the city being considered for urban renewal.

Procedures

The teacher organizes the members of the class into six interest groups of about equal numbers. It is helpful if the participants have several class sessions prior to the game to study their role profiles. In the first session, the interest groups are separated to discuss their strategies. Each interest group selects a spokesman and secretary and attempts to reach a consensus concerning its strategy for urban renewal. The second session is a public meeting of the municipal planning authority where all interest groups present their ideas and plans for urban renewal. Each group has five minutes to make its presentation, followed by a ten-minute discussion period. At the end of this session, the teacher announces the formation of advisory committees comprised of representatives from each interest group. The purpose of these advisory committees is to devise renewal strategies which include many of the ideas of each interest group. The teacher at this time also announces the amount of money available for the urban renewal project. In the third session, the advisory committees meet separately to make plans for the project. Spokesmen and secretaries are selected to present the plans to the next planning authority meeting. The purpose of the fourth session is to hear the advisory committee presentations, with each committee having five minutes for its report. After a discussion period of ten minutes, the teacher announces that the planning authority will choose the best plan and that all players will vote on this choice at the final game meeting. The planning authority then conducts a brief closed meeting to make its choice; the rest of the participants spend that time discussing the possible choices and the decision-making process. During the last segment of this session, the planning authority announces its decision and the players vote to accept or reject the decision of the planning authority. The discussion which follows should focus on whether the decision was a good one; the problem of citizen autonomy versus established authority should emerge from this discussion. A review meeting for debriefing purposes is held to discuss issues that emerge from the game and can be used to discuss students' feelings about the values and attitudes in the role profiles.

Evaluative Comments and Suggestions

The game has 40 possible roles. If there are fewer players than 40, some roles can be eliminated according to a role elimination table provided with the game. The participants have quite a bit of latitude in choosing plans for urban improvement; however, they must work together in the group process. This simulation is particularly useful to introduce or conclude a unit on today's urban problems or, independently, to serve as illustrative material for consideration of contemporary social problems.

INTER-NATION SIMULATION KIT

Developers:	**Cleo H. Cherryholmes, now Michigan State University** **Harold Guetzkow, Northwestern University**
Publisher:	**Science Research Associates, Inc.** **259 East Erie Street** **Chicago, Illinois 60611**
Publication Date:	**1966**
Availability:	**From publisher**
Grade Level:	**9-12 (Adults)**
Subject Area:	**Contemporary Problems, International Relations, Political Science, War/Peace Studies, and World History**
Number of Players:	**14-As many as desired**

Overview

The Inter-Nation Simulation (INS) was originally developed in 1958 as an outgrowth of work in use of war games for military training and strategic planning. It is a "functioning construction of the major features of the international political system" and may be used effectively with high school students and adults. Five, seven, or ten nations are created and their economic and political characteristics are assigned at the beginning of the simulation. Various international situations develop from the interaction of the student decision makers as they seek to advance the economic and political well-being of the nations in which they live. Assuming roles of public officials, students analyze the changing world situation and implement strategies to increase their nation's capability to produce goods and services and strengthen its position in relation to other nations or alliances. Crisis situations develop gradually from the differing characteristics of each nation and the behavior of the student decision makers.

Materials and Cost

Materials Package:	
Cardboard box, 11½" x 10" x 8¾", contains the following:	
Coordinator's Manual: 41 pp., 6" x 9", stapled paper cover; includes explanations for constructing simulated nations, assigning initial characteristics, organizing and operating the simulation, using calculations, equations, and abbreviations	$ 1.20
Student Manual: 57 pp., 6" x 9", stapled paper cover; includes descriptions of participant roles, explanations of political, economic, and military systems, use of forms employed in the simulation, and detailed appendix	$ 1.40
Additional Materials: 350 Main Decision Forms, 250 Inter-Nation Agreement Forms, 300 Exchange Records, 100 Statement of Goals and Strategies, 300 Official Advisory Forms, 150 Force Utilization Forms	
Total Package	$64.80
Additional Sets of Forms	$28.00

Required or Suggested Time

The developers note that the use of INS requires three steps: orientation, operation of the simulation, and analysis of actions. Within this framework, considerable time flexibility is possible. Two weeks preparation of strategies by participants is suggested prior to conducting an all-day simulation. Ninety-minute time periods, corresponding to one calendar year, can be used and extended over several days rather than conducting the all-day simulation. Class periods of 45 to 60 minutes, representing six months, can also be used. Whether conducted in all-day session, 90-minute, or 45-minute periods, the total game playing time should be the equivalent of six calendar years of simulated time. Debriefing can take place at the conclusion of each simulation activity as well as during a general debriefing session at the completion of the entire game. Final debriefing time can vary at the discretion of the teacher and students.

Intended User Characteristics

Students must have a reasonably thorough understanding of the operation and background of the simulation in order to participate effectively. In addition to mastering the contents of the 57 page Student Manual, students should be able to make some mathematical computations and work with statistical tables to calculate the impact of game decisions. The simulation director must be able to answer and resolve any questions regarding the game's operation. A background in international relations will be valuable to the simulation director for explaining INS and important characteristics of the international system. Facilities should enable participants to conduct confidential discussions and either a large room or a number of separate rooms should be available for use.

Rationale and General Objectives

This simulation is meant to be an analytical tool for understanding the complexities of international relations. The developers believe that it is important for students to gain an understanding of foreign policy decision making and that INS makes this study more manageable. They state that participant attitudes toward international relations tend to be more explicit and less generalized after play of the game and that participant motivation to learn more about foreign affairs is significantly increased. Participants gain an understanding of the importance of reliable information and effective communications, improve their understanding of the problems and goals of other nations, and experience the difficulties of balancing national requirements in domestic and foreign affairs.

Content

Participants select or are assigned various government positions within a nation. Either five, seven, or ten nations are used in playing INS. Participants have specific responsibilities as Head of State, Foreign Policy Advisor, Official Domestic Advisor, Foreign Affairs Diplomat, and Domestic Opposition Leader. Their decisions create an extended series of cause and effect relationships as they seek to achieve security, domination, cooperation, or internal growth for their nations. Each simulated nation represents real or fictitious nations of the past, present, or future and interacts with other nations in economic, political, or military ways. The developers stress several related concepts for participant consideration: sovereignty, international law, balance of power, alliances, causes of war, force strategies, propaganda, collective security, disarmament, national interest, diplomacy, developing nations, neutrality, nonalignment, and nationalism.

Procedures

Each nation in the simulation is assigned military, economic, and political characteristics by the simulation director. The officials of each nation, meeting as a National Council, determine whether to use their basic resources for production of goods and services and domestic satisfaction or to increase the force capability and strengthen the international position of their nation. Decisions made by each nation are recorded on appropriate INS forms and submitted to the simulation director and, when appropriate, to affected nations. Political alliances, trade or aid agreements, world conferences, and other arrangements can be advanced in efforts to improve national positions. War occurs when an attacking nation indicates on its decision form the amount of force capability it is committing toward the effort. A negotiated settlement, a surrender, or a continued commitment of force capability results from the encounter and has international ramifications. Domestic "satisfaction" in each country is computed by national officials while the level of satisfaction in foreign affairs is calculated by the simulation director. Failure to achieve "satisfaction" can result in a "revolution" and the changing of national leadership. An International Organization exists and functions according to the desires of the nations. A world newspaper is a source of information and reports inter-nation activities. It is the aim of the participants to achieve a high degree of national consumption satisfaction and sufficient force capability to gain security or domination.

Evaluative Comments and Suggestions

INS portrays the complexities of international relations in a way that enhances participant analysis and understanding of the many variables of domestic and foreign affairs. It is one of the oldest, most carefully developed and refined simulation games available. Thorough participant and director preparation is essential. This is particularly true in overcoming the initial difficulty of becoming accustomed to the many abbreviations used in game play and for gaining some skill in implementing statistical information. Trial sessions and frequent discussion periods are highly recommended.

LIFE CAREER

Developer: Sarane S. Boocock
Academic Games Associates, Inc.
Johns Hopkins University

Publisher: Western Publishing Company, Inc.
Education Division
850 Third Avenue
New York, New York 10022

Publication Date: 1969

Availability: From publisher

Grade Level: 8-12

Subject Area: Human Relations

Number of Players: 2-20

Overview

Life Career was designed to familiarize students with the decision-making problems which are a part of adulthood. Game participants work with a profile of a fictitious person who must allot his time and activities with respect to further education, job training, family life, work, and leisure time. At various intervals in the game, players experience the consequences of their decisions in the form of satisfaction points which reflect how successful they are in achieving the objectives they have planned. *Life Career* encourages students to appreciate the responsibilities and pressures of adulthood and to make rational plans for their lives after leaving school.

Materials and Cost

Materials Package:
- Cardboard box, 12" x 18" x 2½", contains the following:
- Coordinator's Manual: 36 pp., 8½" x 11", stapled paper cover; includes extensive sections on rationale, debriefing sessions, supplementary reading, and suggestions for adapting the game to local community conditions
- Student Manual: 16 pp., 8½" x 11", stapled paper cover; includes rules
- Additional Materials: profile cards, school-job catalogue, spinner, scoring booklet, record sheet, schedule sheet, applications for school and employment

Total Package	$35.00

Required or Suggested Time

The complete simulation game, including a debriefing session, requires approximately six hours; this can fluctuate depending upon the participants' abilities and age levels. The playing sessions are flexible and can be extended to any length, stopped at any time, and continued later. This simulation game seems to work best if played in two-hour sessions; this prevents student fatigue and allows for discussion and questions.

Intended User Characteristics

A large amount of introductory reading is necessary, although challenging for junior high students. Some of the rules and directions can be easily misinterpreted without the guidance of the teacher. Although a considerable amount of mathematical calculation is required of players, the computation of scores consists only of simple addition, subtraction, and multiplication. Physical arrangements require a large room, small tables, or a cluster of desks which allow for teams to work together. The scorer should be separated from the other participants. A master scoreboard (blackboard or large poster) should be provided near the scorer to record the team scores at the conclusion of each round.

Rationale and General Objectives

Since the authors believe that few students have any real understanding of the societal pressures, career life-styles, and family responsibilities of the adult world they will face after leaving school, *Life Career* was developed to stimulate student appreciation for "the meaningfulness and immediacy of career planning" and to encourage students to feel that "their own decisions and actions in the present will have a real effect upon what happens to them in the future."

Content

In *Life Career*, each team or individual works with a case history profile of a fictitious person. The simulation game is organized into 15 decision rounds; each round represents one year. During each decision period, participants structure their person's schedule of activities for a normal week and divide time between school, study, leisure time, and family responsibilities. Obviously, participants cannot participate in all the various activities with equal amounts of time and energy; therefore, it is necessary to choose the combination of activities which will maximize their person's present satisfaction and provide for the best possible life in the future. When necessary decisions are made for that person, scores are computed. Scoring tables and spinners which reflect National Consensus figures are used to tabulate points; these figures are based upon personal character, past achievements, and present efforts of each individual in relation to the contemporary national situation (e.g., job market vs. person's professional training). The team which accumulates the greatest number of points is declared the winner.

Procedures

The game begins when participants organize into teams of two or three and receive profile cards of a fictitious person who is presently in high school. The profiles describe differing verbal, quantitative, and vocational abilities, past school achievements, and family background. Schedule forms, record sheets, and school-job catalogues are also distributed and participants must use them to organize a weekly time sheet which represents a normal week's schedule within that year. Players must rationally choose future goals and present strategies (e.g., how to allocate time) which best reflect the personality and abilities of their fictitious person. For example, to become a doctor requires years of training, intellectual ability, and personal sacrifice in terms of present wealth to achieve the final goal. After the round, scores are tabulated based upon contemporary National Consensus data and personal achievements. Additional rounds (15 years total) represent the person's growth through high school, college, and various occupations. The scoring table is constructed so that players receive the highest total score for accomplishing a combination of activities which best reflect personal ability. Competition is autonomous, and players will be penalized if they extend their fictitious persons beyond their capabilities or fall short of what they could reasonably achieve.

Evaluative Comments and Suggestions

The simulation element adequately reflects the major adult problems involved in exploring, choosing, and taking responsibility for career decisions. The gaming element can be further enhanced if students create their own personality profiles, writing their own school requirements and using community paper want ads to reflect regional job possibilities. *Life Career* would be particularly useful for use by high school counselors and parent education groups. Playing the game requires complete student involvement and reflects high interest. Although there is no idle time in playing the game, a considerable amount of student energy is spent in making mathematical computations. The reality factor could be increased if boy and girl teams simulating marriage were created.

LITTERBUG

Developer: Urban Systems, Inc.
Publisher: Urban Systems, Inc.
1033 Massachusetts Avenue
Cambridge, Massachusetts 02118
Publication Date: 1971
Availability: From Damon Education Company
80 Wilson Way
Westwood, Massachusetts 02090
Grade Level: K-2
Subject Area: Ecology
Number of Players: 2-4

Overview

Litterbug is a board game for very young children, ages 4 to 10, which is designed to teach about the problem of litter in a city. Students attempt to follow the "litterbug" and pick up trash on the city streets and sidewalks. Involvement in the process of picking up litter can lead students to ask questions about what litter is, why it is a problem, and how they can help. These questions are not built into the game, however, and must be brought up by the teacher or answered by her if brought up by the students.

Materials and Cost

Materials Package:
Cardboard box, 18¼" x 9½" x 1¾", contains the following:
Coordinator's Manual: 3 pp., 3¾" x 8½" folded paper pamphlet; contains instructions for conducting the game and for a shortened version
Additional Materials: one 17¾" x 17¾" cardboard game board; spinner, color cube with six colors, 4 litter barrels, paper squares representing trash
Total Package $4.50

Required or Suggested Time

Four players can play the entire game in approximately 30 minutes. If only two students are playing it might possibly take longer. The game can actualy be terminated any time each player has been around the board once.

Intended User Characteristics

The developers of *Litterbug* indicate that it can be played by children aged 4 to 10. However, teachers who have used it indicate that it is too simple for students above the second grade (age 7). No special teacher training or equipment is necessary. Students do not have to read or even count as progress around the board is determined by moving to spaces colored to correspond to colors on the color die.

Rationale and General Objectives

Litterbug is designed to teach very young children to pick up trash in order to keep streets and sidewalks clean. The major game objective is to try to gather up the most trash from the city's streets and sidewalks. By getting students involved in the game, it is hoped they will begin to understand that everyone can help and should help if littering is to be stopped.

Content

Students learn about litter and the importance of picking it up from the streets and sidewalks. The game is not sophisticated enough to involve strategies for preventing littering or for knowing what litter consists of.

Procedures

All pieces of litter are placed in the middle of the board. Each player has a trash barrel which serves as a mover. He rolls the color die and moves to the first space of corresponding color. If litter is pictured on the space, the player calls "Litterbug," picks up a piece of litter from the center, and puts it in his trash barrel. If he lands on a space with a spinner pictured, he calls "Litterbug" and takes two pieces of trash. He then spins the color spinner, moves to a corresponding color space, and proceeds according to the picture in the space. Some spaces are blank, and if the player lands on a blank space he does nothing until his next turn. The player with the most pieces of trash at the end of the game wins.

Evaluative Comments and Suggestions

Very young children, ages 4 to 6, will become involved in playing the game and in landing on squares containing litter. This involvement should maintain a high level of interest. However, important learning such as who produces litter, why people litter, and how litter can be prevented are not part of this game. The pictures representing litter on the game board and on the small pieces of paper trash do not graphically picture real litter but are just squiggly lines. The teacher might want to add to the realism of the game by at least making pictures of trash which represent things—banana peels, apple cores, gum wrappers, newspapers, and so forth. The game itself will not teach anything about litter and the problem it creates unless the teacher makes a point of discussing these things with the students. Otherwise, players will merely be competing to see how many pieces of paper litter they can pick up, just as they might compete to see how many checkers they can get from the other player. Real learning about litter as an ecological problem is not part of the game.

MARKET

Developer: **Elementary Economics Project**
Industrial Relations Center
University of Chicago
Publisher: **Benefic Press**
10300 West Roosevelt Road
Westchester, Illinois 60153
Publication Date: **1971**
Availability: **From publisher**
Grade Level: **6-8**
Subject Area: **Economics**
Number of Players: **8-20**

Overview

Market was originally designed as an integral part of the upper elementary materials of the Elementary Economics Project which was developed by the Industrial Relations Center at the University of Chicago under the direction of William D. Rader. *Market* simulates everyday purchasing and selling of basic food products and helps students understand the economic principles of supply and demand. This game, which was originally designed as part of a 22-week program in the Rader materials, is now offered separately as part of a four week unit referred to as "Economic Man in the Market."

Materials and Cost

Materials Package:

Plastic-covered cardboard box, 18½" x 12¼" x 3¾", contains the following:

Coordinator's Manual: 24 pp., 8½" x 11", stapled paper cover

Retailer Envelopes: 7 envelopes; each envelope serves one 2-student team and includes rules for *Market*, rules for retailers, retailer order list, money

Consumer Envelopes: 13 envelopes; each envelope serves one 2-student team and includes rules for *Market*, rules for consumers, Dinner Menu Sheet, shopping board, money

Additional Materials: 7 boxes of 30 food cards, extra paper money, box of coins, 30 consumer score sheets, 30 retailer order lists, 15 dinner menu sheets, 15 retailer price lists

Total Package	$54.00
Coordinator's Manual: 56 pp., 8½" x 11", paperbound; includes economic background, Coordinator's Manual, annotated bibliographies; free with class order of material; purchased separately	$ .96
Supplementary Student Manual: 32 pp., 8½" x 11", paperbound; Combined student text and work book	.48

Required or Suggested Time

The unit "Economic Man in the Market," is designed for three weeks. The game *Market* itself will require approximately three social studies classroom periods to play the first time; the authors suggest it should be played a second time, requiring two additional periods. Therefore, *Market* will require approximately one week of five social studies classroom periods.

Intended User Characteristics

Participants should have some basic knowledge of economics and should understand specific terms, i.e., supply, demand, and market, before attempting the game. *Market* requires a great amount of reading but should not present comprehension difficulties for the average student. Arithmetic computation requires simple addition and subtraction skills. To facilitate smooth gaming procedures and a minimum of participant traffic and noise, a large room is necessary; desks should be paired and placed around the perimeter of the classroom for the retailer teams. The consumer groups locate their chairs in the center of the room. The teacher assumes the role of coordinator and sometimes becomes a wholesaler if there is an odd number of participants.

Rationale

The purpose of the game is to illustrate the economic principles of supply and demand. The authors intend for the students to appreciate how informed, rational planning greatly increases the efficient utilization of personal monetary resources.

Content

Market simulates interchange activities between consumers and retailers at a grocery store. The retailer teams, which purchase Food Cards and rental space, must achieve a profit by selling the cards at a competitive price above the food cost. They must solve the problem of balancing their desire for high profits against the necessity to create competitive prices. The consumer team must successfully purchase the Food Cards at the lowest possible price while filling their Shopping Board of 30 spaces to complete the requirement for six dinner meals.

Procedures

Participants are divided into pairs to form consumer and retailer teams. The room is arranged by situating the retailer team desks around the classroom perimeter and the consumer teams in the center. A wholesaler team is determined, rules are read, materials are distributed, and *Market* begins. The planning period (10-30 minutes) starts with retailers paying rent ($1.00) and purchasing one complete set of Food Cards ($10.15) to complete their sale price lists. Simultaneously, the consumer teams plan their meals, recording the prices they wish to pay for each Food Card. The market periods (10 minutes) provide the opportunity for consumers' and retailers' exchange of products and currency. The remaining two periods follow the same schedule and deadlines, with retailers filling out their order lists of products which are purchased from the wholesaler, and consumers planning the remainder of their meals. Winners are the retailer team which has made the greatest profit in selling Food Cards (wholesale prices vs. consumer prices) and the consumer team which has purchased the required amount of food at the lowest price. The teacher assumes the role of game coordinator and debriefer to facilitate student conceptualization of the principles of supply and demand. Game play is preceded by readings and exercises in the student manual, and is followed by debriefing, discussions, exercises, and a role play.

Evaluative Comments and Suggestions

The gaming element does not need to be emphasized since students become actively involved in the simulation and are not deeply concerned with the concept of winning. The teacher should coordinate his supervision of the simulation activities with his planning of the debriefing session to insure that the participants will understand the relationships between the simulation activities and the economic principles which are basic to the simulation.

METROPOLITICS

Developer: R. Garry Shirts
Publisher: Simile II
1150 Silverado
La Jolla, California 92037
Publication Date: 1970
Availability: From publisher
Grade Level: 9-12 (7, 8) (Adults)
Subject Area: Political Science and Urban Studies
Number of Players: 18-35

Overview

"The purpose of this simulation is to expose the participants in a vivid and interesting manner to the problems of the city and some of the political solutions that have been proposed for these problems." Students role play various members of an urban community, Skelter City. "Through persuasion and coalition formation they attempt to get one of four different forms of government adopted for the area." It is a relatively short simulation, designed to be played in two hours, and is intended for use with mature junior high school students, high school students, and adults.

Materials and Cost

Materials Package:

- Cardboard box, 12" x 9" x 6½", contains the following:
- Coordinator's Manual: 18 pp., 4¼" x 6", stapled paper cover; includes overview, instructions for the simulation, and reprints of the six propositions
- Student Manual: 22 pp., 5½" x 8½", stapled paper cover; includes background information, rules and procedures, reprints of the six propositions and maps of Skelter County; 35 per package
- Additional Materials: 35 role description cards, 35 pressure group cards, 35 envelopes for cards and voting chips, 1 package of chips, and 6 sacks to be used as ballot boxes

Total Package	$25.00
Sample Set	$ 3.00

Required or Suggested Time

These materials were designed as a class activity lasting approximately two hours. An additional class period should be provided for debriefing the experience and discussing the implications of *Metropolitics* in real life.

Intended User Characteristics

Simile II recommends this game be used with "mature" junior high school students, high school students, or adults. No special skills are required beyond the ability to read role cards. It would, however, be helpful for students to have some prior knowledge of the mechanics of local government legislative procedures. The Coordinator's Manual states that the teacher need not be an "expert" in urban affairs to use the game. However, some readings are recommended to provide background for acting as a resource person. Aside from this, preparation takes less than half an hour. The room should be large enough to facilitate group meetings. The guide recommends the room contain "a chalkboard, and a few desks and chairs around the edge . . . to allow people to write, study, and meet in small groups."

Rationale and General Objectives

Metropolitics was designed to allow students to gain insight into urban problems and to explore some possible ways of solving some of these problems through political means. The game is intended "to introduce groups to the opportunities and problems associated with various types of governments found in metropolitan areas." While the main emphasis is on the cognitive aspects of urban problems, students are given the opportunity to interact with each other and to organize along lines of common interest. The game should help them begin to see the importance of coalition formation, as well as to develop skill in critical examination of proposed political measures.

Content

The participants in *Metropolitics* are asked to "weigh the strengths and weaknesses" of six propositions which have been proposed for a referendum in Skelter City.

The students may form into pressure groups based on their assigned roles in order to promote or defeat these propositions. They negotiate and vote on the propositions and try to come up with a single proposition acceptable to the majority. Through their study of the proposals, their interaction, and discussions following the simulation, participants quickly become familiar with four prototypes of metropolitan government: the two-level approach, the single-county approach, the special district approach, and the neighborhood approach.

Procedures

Before the simulation begins, the teacher must arrange the room for small group work, tack up the "ballot box sacks" in an area where participants can vote secretly, and prepare the role envelopes and voting chips. The participants read their instruction booklets, choose an envelope containing a role and voting chips, and acquaint themselves wtih their specific situations. The numbers of voting chips attached to each role distinguishes among community members of varying degrees of influence. The teacher asks if any of the participants has the intention of forming a pressure group. Students are encouraged to state their position in the community, their intentions, and their feelings about each proposition. This procedure allows participants to locate and identify potential allies. Students next begin to form pressure groups through informal discussions. When at least three people join and declare their intentions of forming a pressure group, each member receives additional chips, signifying the additional influence acquired by joining with others of similar interests. New groups may be formed at any time, and old ones may break up. After approximately twenty minutes, pressure groups are asked to make public statements in favor of or opposed to each of the propositions. An additional five minutes is allowed for final alignment of pressure group membership. The first referendum is called for by having students put their chips in the "ballot box" of their choice. The proposition receiving the most votes is put on the final referendum. In preparing for the final referendum, the procedure for forming new pressure groups is repeated. Students then vote for or against the final proposition and the results are announced. In the debriefing session, the teacher provides clarification, direction, and summation. Questions for stimulating student discussion about the simulation and about comparisons of the simulation with the "real world" are suggested in the Coordinator's Manual.

Evaluative Comments and Suggestions

This simulation technique appears to be applicable throughout grades 7-12. The propositions could be modified in order to more adequately reflect the interests and reading level of younger students. Although *Metropolitics* "emphasizes content rather than process," the procedures could be used to study problems found in any type of organization governed by a representative democracy. Through the relatively simple device of allotting influence chips differentially, the unequal distribution of power within the community is reflected, and a way of increasing individual power (chips) by cooperating with others is provided.

MULBERRY

Developers: **Dorothy Dodge and Jimmie Powell**
Macalester College
Publisher: **Paul S. Amidon and Associates, Inc.**
5408 Chicago Avenue South
Minneapolis, Minnesota 55417
Publication Date: **1970**
Availability: **From publisher**
Grade Level: **10-14 (Adults)**
Subject Area: **Political Science and Urban Problems**
Number of Players: **25-35**

Overview

Mulberry is a simulation designed to provide insight into the problems faced by communities with urban renewal programs. Participants attempt "to devise a political solution that can combine the use of federal monies, local government planning, and private development, but still meet the needs and insure the rights of citizens adversely affected by the project." In order to role play private citizens and city officials, the developers provide character sketches, socio-economic data, and positions on issues for the participants. Also included are Sector Manuals outlining organizational objectives for groups such as the City Council, Downtown Real Estate Association, etc. As in real life, it is possible for players to belong to more than one organization. Although designed for senior high and junior college students, the simulation could easily be adapted for use by adults interested in community planning. No Coordinator's Manual is available.

Materials and Cost

Materials Package:

Leatherette briefcase, 10" x 16" x 2", contains the following:

Student Manual: 18 pp., 5½" x 8½", spiralbound paper cover; includes general objectives, a brief history of urban renewal programs, description of roles, rules, scoring procedures and activities, and a map of Mulberry; 35 per package

Sector Manuals: 8½" x 11", stapled paper cover; each gives necessary data about one of seven community agencies

Additional Materials: 27 biographical statements providing character sketches; one 8½" x 11" pad of Socio-Economic Status report forms

Total Package $50.00

Required or Suggested Time

Although these materials were designed for three to five class sessions, their use could be expanded by encouraging more intergroup negotiation, *ad hoc* group formation, etc. Because of the rich subject matter, the debriefing sessions could conceivably take several class periods.

Intended User Characteristics

Some participant background in urban politics, community organization, and urban government would be helpful, but is not essential. Participants need enough reading ability to understand their roles and the information provided in the Sector Manuals. Only basic mathematical skills are necessary. The teacher should be familiar with the history of urban renewal programs, basic terminology, and laws. No special equipment is necessary, although a large playing area to accommodate simultaneous group meetings is desirable.

Rationale and General Objectives

Mulberry was designed to give urban, suburban, and rural students insights into the complexities of urban renewal programs. All Amidon games are predicated upon a belief that simulations can enhance the total learning environment. By role-playing members of the community in the real-life situation of planning urban improvements, students should gain an understanding of the process of political change. The developers provide for cognitive gain by including basic social science concepts from the disciplines of economics, history, political science, and sociology. Group interaction will promote the acquisition of skills in communciation and problem-solving.

Content

A fictional midwestern city called Greenbriar has problems which are typical of most large cities: urban decay, declining revenue, increased crime rates, unemployment, and greater demand for public services. The mayor of Greenbriar, who campaigned for reelection on the issue of urban renewal, is seeking to develop a "Workable Program" for the neighborhood of Mulberry. He is assisted in this effort by a federally financed administrative agency, the Mulberry Community Development Authority (MCDA). Throughout the game, City Council members, professionals from the MCDA, members of the Downtown Real Estate Association, representatives from private industry, residents of Mulberry, and citizens of Greenbriar seek to maximize their own individual interests and those of the interest groups to which they belong. Individual participants can increase their scores according to such factors as political effectiveness, style, sense of citizen duty, extent of activity, and increase in personal wealth. They also gain points when the interest group to which they belong is effective in reaching its goals, maintains popular support, or is responsive to community needs.

Procedures

After the various roles are assigned to students, opportunity should be provided to study background information and role characteristics. They should consider the stands they will take on issues and begin to develop arguments to support their proposals. Following this preliminary examination of materials, 15 minutes is allowed for the agencies and sectors to assign tasks. One spokesman for each sector must present an outline of the group's proposal to a town meeting called by the mayor. Anyone who wishes to speak at the town meeting may do so, although most views are presented through a spokesman. Following the town meeting "the scheduling of all other activities is up to the participants. The City Council is required to hold one meeting each period. A period is one hour and is equal to three months of real time. The Mulberry Community Development Association is required to hold a public hearing every two periods." Numerous activities are provided for participants; the objective is to develop a workable urban renewal program. The coordinator serves as Representative of the Federal Government and is expected to "1) clarify the requirements of the workable program; 2) listen to complaints from citizens about the project; 3) decide whether the money shall be allocated for the plan finally approved by the participants in *Mulberry*."

Evaluative Comments and Suggestions

Mulberry is a brief, concise simulation designed for a week's study of urban renewal. If the guidelines are followed, the participants should become involved in a meaningful learning experience. The absence of a specific teacher's guide should not handicap the teacher as plentiful directions are provided in the other game components. Modifications could also be developed in order to use local community resources.

NAPOLI

Developer:	**Western Behavioral Sciences Institute**
Publisher:	**Simile II** **1150 Silverado** **La Jolla, California 92037**
Publication Date:	**1969**
Availability:	**From publisher**
Grade Level:	**7-12 (13-14)**
Subject Area:	**Political Science**
Number of Players:	**16-40**

Overview

NAPOLI (NAtional POLItics) is a simulation game in which students act as members of a legislature. Each participant belongs to one of two political parties and represents one of the eight states which make up the simulated nation. *NAPOLI* was designed to illustrate legislative processes and personal/political problems inherent in a representative democracy. Each participant tries to assure himself of reelection. The passage or defeat of various bills determines whether or not one is reelected. *NAPOLI* concludes when all bills have been acted upon, and the election results are calculated.

Materials and Cost

Coordinator's Manual: 15 pp., 4½" x 6", stapled paper cover; includes a rationale for using simulations, background information, suggestions for pre-game preparations, directions for conducting the simulation, debriefing ideas, suggestions for modifying the game, and list of supplies and equipment needed

Student Manual: 16 pp., 5½" x 8½"; contains a map of Napoli, background information for participants, instructions for playing and scoring, descriptions of the parties, sample Legislator's Record Form, and descriptions of the 11 bills

Additional Materials: Instructions for the Speaker of the House, instructions for *NAPOLI* Calculator, Legislator's Record Form and Poll Results for each state, Election Results Forms

Total Package

Classroom set for 25 students	$35.00
Classroom set for 35 students	$50.00
Extra set of consumable materials	$ 2.50
Sample set of the simulation	$ 3.00

Required or Suggested Time

The developers suggest *NAPOLI* can be played in one session of approximately three hours, but it can easily and profitably be played in several shorter sessions. The total playing time can also be expanded or shortened if necessary.

Intended User Characteristics

NAPOLI was designed for junior and senior high school students. The student manual requires at least 7th grade reading skills and some knowledge of legislative processes. The calculator's role requires the ability to make simple computations. *NAPOLI* can also be used with college students. At senior high and college level, students can be encouraged to write their own bills for consideration by the legislature.

Rationale and General Objectives

NAPOLI was developed to provide insight into the legislative processes in a representative democracy. It was not designed to represent the exact procedure of either house of the United States Congress, but to help students understand the problems inherent in a system of representative democracy. Students should learn that a representative's role is very complex: he is constantly faced with the possibility of not being reelected if he sponsors legislation which is unpopular with his constituency. Participants should also learn that logrolling, the practice of making mutually beneficial arrangements with other legislators, is an essential ingredient in the legislative process. *NAPOLI* is intended to help students experience the "rough reality of 'give and take' politics and develop an awareness of the basic issues facing our nation."

Content

Napoli is a simulated nation composed of eight states—Garu, Agra, Coro, Efra, Baha, Inda, Hela, and Dami. The action of the game takes place in the national legislature, where representatives of the eight states, who are also members of the two political parties—the Napoli Conservative Party (NCP) or the Napoli Liberal Party (NLP)—negotiate, debate, and vote on the fate of 11 bills. Topics of the 11 bills include the national debt, voting age, the electoral college, poverty, U.N. membership, civil defense, oil depletion allowance, pollution, urban renewal, geological survey, and the space program. Each legislator must serve both the interests of his party and of his constituency to assure his reelection. As in real life, the interests of the two groups are not always mutually supportive. Most legislators find it essential to solicit support from representatives of the opposition party and from legislators representing other states. In order to get this support, they must often agree to support bills with which they, or their party, or their constituents do not agree.

Procedures

The coordinator briefly explains the objectives of *NAPOLI*, followed by a ten- to thirty-minute period for students to read the student manual. Roles are either assigned by the coordinator or selected by students. One student acts as the Calculator, one student may act as the Director of the game if the teacher so opts, and the remainder of the class assume the legislators' roles. Legislators are divided among the states as evenly as possible; the party split should be about 55%/45%, to reflect a typical majority/minority split in legislatures. After party affiliations are worked out, the majority party selects the Speaker of the House, who must study his instructions thoroughly before any significant political activity takes place. Party and state caucuses take place during which the representatives make initial decisions about bills they wish to support. The first legislative session follows, and debates on the various bills take place. Party caucuses, state caucuses, and legislative sessions are repeated until all 11 bills are either enacted into law or defeated. At the conclusion of the final legislative session, each legislator is informed by the Calculator of his chances for reelection.

The Coordinator's Manual stresses the importance of the debriefing which follows play—"often the most intense involvement occurs after the play, when participants discuss the strategies which they followed, their perceptions of the events in the simulation, etc."— and suggests some topics to highlight in the debriefing. Numerous suggestions are given in the Coordinator's Manual for modifying *NAPOLI* to fit the special needs of the participants.

Evaluative Comments and Suggestions

NAPOLI can be a profitable educational experience for participants, but the level of understanding will depend upon the debriefing session. It is suggested that the teacher take note of political maneuvers and agreements throughout the activity, and formulate questions prior to the conclusion of the final legislative session. If *NAPOLI* is used with senior high or college students, the teacher can easily modify the game to increase its realism. Students can write their own bills, legislative committees can be formed, or the entire activity can be adapted to particular periods in U.S. history. Using *NAPOLI* more than one time can be worthwhile. First conduct it in its published form, analyze it, and then adapt it according to one of the above suggestions. Students who participate in *NAPOLI* could possibly become upset over the fact that log-rolling and deals take place in political institutions. Teachers should not attempt to hide such insights, but should help students understand that compromise is an essential ingredient in representative democracy.

NEW TOWN

Developer: **Barry R. Lawson**
Publisher: **Harwell Associates**
Box 95
Dover, New Jersey 07961
Publication Date: **1971**
Availability: **From publisher**
Grade Level: **7-12 (Adults)**
Subject Area: **Environmental Education, Political Science, Urban Studies**
Number of Players: **4-10**

Overview

Designed originally by Barry R. Lawson in 1967 for professional businessmen and community planners, *New Town* has been revised into five broadly defined exercises to accommodate students of different ages, interests, and ability levels. Up to four teams or players purchase land; build factories, homes, and stores; vote on parks, schools, and municipal services; and experience aspects of financial success, environmental problems, and municipal growth. Participants must consider to what extent they will compete for personal fortune and work cooperatively to create a clean, well-organized community.

Materials and Cost

Materials Package:
- Cardboard box, 18¾" x 9" x 2", contains the following:
- Coordinator's Manual: 22 pp., 8½" x 11", stapled paper cover; includes objectives, organization of various levels of the game, and suggested discussion questions
- Additional Materials: 1 cardboard game board, 18" x 18½", 1 pair of dice, 5 sets of multi-colored building markers, 1 pad of score and activity sheets, and money

Total Package $16.00

Required or Suggested Time

New Town can be played in one to four hours, depending on which of the five levels of play is chosen. The game exercises are broadly defined to encourage the teacher and participants to adapt the game to their own community background and personal experiences.

Intended User Characteristics

The game is structured to be played at five different levels of complexity. Computation skills are required for bidding on land, determining investment possibilities, and calculating penalties and bonuses. The game can be played in a traditional classroom with a large table. The teacher's role consists of explaining the rules, leading discussions, and possibly being Town Clerk. No previous background in urban studies or environmental education for students or teachers is necessary. Developers suggest that groups of greater than ten participants should be separated to play independent games of *New Town*.

Rationale and General Objectives

The developers state that the game was developed to introduce "students to the community around them and how man and his technology relate to that world." *New Town* primarily encourages students to consider two aspects of urban growth: 1) private enterprise, and 2) environmental quality; they must also inquire to what extent those aspects are in conflict. One major intended outcome assumed by the authors is to show students that quality community growth is dependent on the cooperation of its citizens.

Content

New Town simulates community development as students assume the roles of businessmen, municipal leaders, and citizens who are concerned with earning profits as well as maintaining environmental quality. Players competitively bid for land; hold town council meetings; vote on new public facilities; develop industry and housing; and react to environmental problems and government anti-pollution measures. The lower level games show players why homes, factories, and businesses are located in certain areas of a community. More complex levels of the game introduce the roles of a town council and a planner. These new roles provide means for greater citizen control over urban development and greater possibilities for long term rational planning. The developers of *New Town* encourage the instructor to stop the game periodically and discuss how the game is progressing. Discussion questions provided in the Coordinator's Manual encourage students to consider the complexity of municipal government/local business interrelationships as viable political mechanisms for resolving conflicting interests while rationally extending community growth.

Procedures

Players assume the roles of businessmen, town clerk, town councilmen, and town planners. The town clerk distributes $15,000 to each businessman who then by secret ballot bids on property. The game consists of six rounds; each round follows the same general format. Each player rolls the dice five times during each round, having the opportunity to buy, rent, and develop property as designated by the throw of dice. Certain other dice numbers represent special incidents, such as government anti-pollution penalties, natural calamities, and business bonuses. Before rounds two, four, and six, a town meeting is held prior to bidding for land in order to discuss and vote on community projects such as schools, hospitals, and sewage treatment plants. The building of public facilities increases chances for bonus points and avoids penalties. However, payment for public facilities comes from individual participants who will have less money to develop individual property. Players accumulate points based on land values, building assets, bonus points (for environmental quality), minus whatever penalties they accrue. The winner is the player or team who has accumulated the most points. The exercises suggested in the Coordinator's Manual allow for adapting the game to different uses and ability levels. For instance, more sophisticated students can start in the third round with some property previously distributed and developed and with the addition of a town planner who exercises power in game decisions.

Evaluative Comments and Suggestions

The game has been used successfully with a wide range of students throughout the United States and Canada. One major criticism for use with younger players is that there is too much bookwork involved, both in bidding for land and town council balloting on public issues. This game is good for both teachers and students who have not had previous experience with simulation, primarily because the game proceeds from an easily mastered format at level one to progressively more complex formats in the levels which follow.

PEACE

Developer:	**Arthur Peterson**
Publisher:	**Interact Company P. O. Box 262 Lakeside, California 92040**
Publication Date:	**1972**
Availability:	**From publisher**
Grade Level:	**7-12 (13-14)**
Subject Area:	**American History and International Relations**
Number of Players:	**18-35**

Overview

Peace was developed and modified, based on classroom use, by an experienced teacher, Arthur Peterson. It is a four-week simulation activity "designed to involve high school students in events and decisions surrounding World War I." There are two phases to this simulation of the war-peace issues of the Wilsonian Era. In the first, students role play five historical political factions which took differing positions on the events leading to America's entry into the war, attempted to influence President Wilson during the war, and attempted to influence the government and the public during the Versailles Peace Conference. In the second phase, the "students become United States Senators . . . [who] deliberate and debate the elements of the Versailles Peace Treaty." Through the simulation, students gain an understanding of present United States foreign policy decisions, of influences operating on the decision-making process, and of world-wide effects of U. S. foreign policy decisions.

Materials and Cost

Materials Package:

One 8½" x 11" booklet with removable plastic binding; booklet is designed as a guide for the teacher to use in producing the game materials; each page may be removed individually and duplicated for classroom use; booklet contains the following:

Coordinator's Manual: 42 pp., includes rationale, set-up directions, Unit Time Chart, annotated bibliography, objectives and overview, daily lesson plans, and reproducible masters for the following student materials:

Understanding the Factions, Why I Am A(n) Outline, Score Sheet, Origins of World War I, map of Europe in 1914, Map Exercise Key and Directions, Model for Appeal to Wilson, Depth Options, International Crisis: What Can a President Do?, Making Decisions, International Incidents, Opinion Grams, Guide to Fallacious Arguments, Should Wilson Go to Versailles?, Peace Conference Instructions, Wire Service Headlines, Faction Fallacies, Fallacy Identification Form, Opinion Survey, Scoring the Opinion Survey, Senate Factions, Facts and Factions, 5 Strategy Sheets, What Do You Know About World War I, 5 Opinions

Student Manual: 1 p.; contains explanation of activities, a description of the original factions, and background information; 35 per package

Total Package (One Booklet)	$10.00

Required or Suggested Time

The developer provides a Unit Time Chart outlining a four-week (20 50-minute class periods) schedule of activities. Suggestions are made for both expansion and contraction of the simulation, and the developer encourages adaptation to the particular needs and interests of the students.

Intended User Characteristics

Since *Peace* was designed with a broad age-range of students in mind, the teacher may have to modify the suggested procedures and materials to mesh with students' abilities, interests, and background knowledge. No special background in U. S. foreign policy and history is required for the teacher at the junior high level; however, teacher background becomes increasingly vital to the learning experience as the sophistication of the students increases through high school and into college. The use of a history textbook as a supplement to the game is assumed; and the use of supplementary books, films, filmstrips, and primary historical sources is strongly suggested.

The school or district library or resource center should be involved in the planning and implementation of the simulation. The room in which the game is played should have enough space for students to move about and for the five factions to have meeting areas. Teacher preparation before the game involves reproduction of numerous student materials.

Rationale and General Objectives

Peace attempts to provide students with an historical perspective on the complexities of international relations today and the influence of the United States on decisions made in the world arena. The Coordinator's Manual lists 14 knowledge, skill, and attitude objectives of the simulation. Included are such student experiences as developing knowledge of the European origins of the war and of the issues raised during the peace conference; developing skill in recognizing and raising questions about statements of opinion and in recognizing that facts can be interpreted in more than one way; and developing attitudes of "respect for the complexity of motivations of various men and countries in their relations with foreign countries" and "awareness that compromise is a necessary feature of the American political system."

Content

The historical setting of *Peace* is the period 1914-1919, from the time prior to U. S. entry into World War I through the congressional debates over the ratification of the Versailles Treaty. The students join one of five factions—Idealists, Realists, Anglophiles, Francophiles, and Germanophiles—and attempt to influence governmental action and the public through various means. Following the signing of the peace treaty, students take roles as "U. S. Senators of various political persuasions"—Wilsonians, Strong Reservationists, Irreconcilables, Mild Reservationists, and Loyalists—and deliberate over the Versailles Treaty.

Procedures

Peace is a month-long instructional unit tied together by the progressive development of the simulation. A variety of learning activities, supported by numerous student materials, are incorporated into the overall format of the simulation. The development of the game occurs in two phases. The first, covering the period from 1914 to 1919 through the signing of the peace, lasts from Day 1 through Day 15. The second phase, Day 15 to Day 18, deals with the Senate debate over ratification of the Versailles Treaty. Days 19 and 20 are devoted to debriefing and evaluation. This includes discussion of the content of the game and discussion or writing of student opinions about the usefulness of the simulation technique in learning about the World War I period. Scoring of individuals and groups is accomplished through the award of IPS (Individual Points) and FPS (Faction Points) for accomplishment of various assignments. At the end of the game, the winning factions are determined by totaling the FPS accumulated; the teacher may use the scores on individual assignments for determining individuals' grades. The Coordinator's Manual gives detailed, step-by-step instructions for carrying out activities on each of the 20 class days involved. As indicated by the developer, activities can be compressed, eliminated, or expanded as befits the needs and interest of the particular group of players.

Evaluative Comments and Suggestions

Peace is a well organized and effectively designed simulation dealing with American foreign policy decision-making in the World War I era. However, the depth of the student learning experience is in direct proportion to the depth and breadth of the supplementary materials and media made available for student research. This assumes that more than just a history textbook is available and that there is time available for students to use the materials. A considerable amount of reading is necessary, although it can be adjusted to the age and ability levels of the participants. The game is complex and rather long, aspects which might create problems for teachers who tend to be disorganized or have restless classes.

PEOPLE IN ACTION

Developers:	**Fannie Shaftel and George Shaftel**
Publisher:	**Holt, Rinehart and Winston, Inc. 383 Madison Avenue New York, New York 10017**
Publication Date:	**1970**
Availability:	**From publisher**
Grade Level:	**1-3 (4)**
Subject Area:	**Human Relations and Social Problems**
Number of Players:	**3-36**

Overview

Developed by Fannie and George Shaftel, *People in Action* is based on their years of work in use of role-playing for instructional purposes, primarily with young people. Students look at large mounted photographs and are then led through discussion to an understanding of the concepts and problems illustrated by the photos. The materials increase in sophistication as they progress from levels A through E. Through skillful questioning and clarification by the teacher and role-playing activities and discussion by the students, children using these materials develop their skills in communication and acquire greater understanding of what constitutes responsible social action.

Materials and Cost

Coordinator's Manual:

People in Action: Level A. By Fannie and George Shaftel. 36 pp., 7¼" x 9", stapled paper cover; includes explanation of role-play theory, instructions for use of the materials, and detailed procedures for individual role-play lessons

People in Action: Levels B, C, D, E. By Fannie and George Shaftel. 63 pp., 7¼" x 9", stapled paper cover; includes explanation of role-play theory, instructions for use of the materials, and detailed procedures for individual role-play lessons

Additional Materials:

5 sets of spiral-bound photographs mounted on heavy cardboard; one set for each of levels A, B, C, D, and E; each set is 17½" x 23½"; Level A contains 12 Photo-Problems and the other levels each contain 8 Photo-Problems

Total Package	$50.40
Levels Purchased Separately	each $10.50

Required or Suggested Time

No specific suggestions are made for length of time necessary to use these materials. Thirty minutes of classroom time could easily be devoted to each of the Photo-Problems, preferably interspersed at various times throughout the year, or spread over several years of social studies instruction, so that students can continually increase and reinforce their skills in communication and problems analysis.

Intended User Characteristics

These materials may be used with students of wide ranging ability levels and ethnic backgrounds. The problems and concepts upon which the materials focus become increasingly sophisticated in the progression from levels A through E. Teachers need no prior training; the Coordinator's Manuals are explicit and helpful. Teachers should, however, be sensitive to the spontaneous and varied responses children may make as they attempt to understand and role-play situations that not only portray values conflicts in others but in themselves. Although simple in concept, role-playing can produce complex, emotional experiences for both teachers and students; therefore the teacher should use role-playing with thoughtfulness and sensitivity.

Rationale and General Objectives

These materials are based on the developers' belief that young people can learn to communicate more effectively by examining problems and issues which are relevant to them through the use of role-play and discussion activities, designed as instructional experiences. Understanding and communication of socially relevant problems is not enough, however. The developers further emphasize the usefulness of role-play as a device which encourages the examination of the consquences of social action, thereby facilitating more responsible action on the part of students when they encounter similar problems in the "real world." These problem-centered and concept-centered role-play and discussion materials, designed to be suitable for use by students with a wide range of ability levels and interests, are thus aimed at improving students' communication and analysis skills, helping students gain experience in attempting to solve "people" kinds of problems, and helping them internalize their experiences so that they can be more effective in understanding situations and resolving problems which may arise in their own lives.

Content

According to the developers, the *People in Action* photographs are divided into "those photographs that present concepts to be discussed and those that present a problem to be resolved," although significant concepts underlie each of the photos. Some of the situations illustrated for discussion and/or role-play involve a child's conflict in buying shoes when she and her mother disagree about what she should get, an older sister getting a new dress when a younger child does not, a Japanese mother cooking a meal native to Japan for a small group of youngsters of varied backgrounds, and two small boys seeing a fire and having opportunities to do something about it. All of the photographs present ideas or problems which are of interest to elementary-grade children.

Procedures

Each Coordinator's Manual outlines two sets of procedures for use of these materials —one for role-playing problem situations and one for discussion of issues or problems. The following sequence of steps for role-playing are listed, basically as they appear in both Coordinator's Manuals: 1) warm-up, in which the teacher prepares the students for the activity; 2) presentation of the photograph; 3) eliciting of student reactions to and discussion about the photograph; 4) guidance and invitation to role-play; 5) student role-play; 6) discussion of possible solutions to the role-played situation; 7) role-play of a possible solution; 8) discussion of the role-played solution; 9) further role-play; and 10) final discussion of consequences of actions taken to resolve the problem.

Procedures for discussion of a photograph differ, notably in that they do not involve student enactment of the situations illustrated. The Coordinator's Manuals explain the discussion techniques involved: 1) recall of experiences; 2) expansion or translation of the experience; 3) interpretation; 4) identification of main ideas; 5) analysis and synthesis; and 6) evaluation of the ideas discussed and problems posed. It is the intent of the developers to guide students through progressively higher-order levels of thinking and conceptualization by structuring discussion questions and responses according to the series of steps listed above.

Evaluative Comments and Suggestions

Use of *People in Action* can be an imaginative and significant contribution to the school experiences of young people in early elementary grades. The developers of these materials have done considerable work over a number of years to prepare these materials for use as bases for effective instructional experiences. If used appropriately, they can facilitate children's understanding of complex personal and social problems and make possible the translation of this understanding into responsible social action. Since the materials are designed to pose progressively more complex problems from Levels A through E, they can be used with both a wide range of student age groups and abilities within a single grade level, and also across grade levels or in non-graded situations. The Coordinator's Manuals are well-written and helpful, even to the teacher with no previous experience in use of role-play and discussion techniques as instructional strategies.

References

Shaftel, Fannie, and George Shaftel. *Role-Playing for Social Values: Decision-Making in the Social Studies.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967. 431 pp.

POLLUTION: NEGOTIATING A CLEAN ENVIRONMENT

Developer: **Paul Twelker**
Publisher: **Instructional Development Corporation**
7708 O'Neill Road North
Salem, Oregon 97305
Publication Date: **1971**
Availability: **From publisher**
Grade Level: **7-12 (Adults)**
Subject Area: **Ecology and Sociology**
Number of Players: **4-32**

Overview

Pollution: Negotiating a Clean Environment is a flexible and easily-played game. It was developed by Paul Twelker and is a game concerned primarily with problems of developing a cleaner environment. Four societal forces are reflected in the game roles—Business and Industry, Citizens, Conservationists, and State Government. Each force negotiates to work out a compromise between his concern for the environmental quality of life and his achievement of personal and corporate goals. This game is useful in courses that focus on societal implications of environmental problems, and can be played by junior high, senior high, and adult students.

Materials and Cost

Materials Package:

- Cardboard box, 11¾" x 8½" x ¾", contains the following:
- Coordinator's Manual: 15 pp., 5½" x 8½", stapled paper cover; includes rationale, objectives, instructions for game preparation, briefing, action, and debriefing, suggestions for variations, and follow-up activities
- Additional Materials: 4 sets of player role cards, 30 issue and opinion poll cards, 4 sets of voting symbols, 4 sets of scoring charts, 4 sets of scoring markers, 4 overhead transparencies used in briefing participants on their roles

Total Package $22.50

Required or Suggested Time

This game can be played in one class period; however, it is easily adaptable and can be stopped and started in a variety of settings. Each round of the game takes about five minutes to play. If the game is played in one class period of about 40 minutes, a second period is usually needed to conduct the debriefing session. Paul Twelker, in the Coordinator's Manual, suggests that the game can be used effectively several times in the course of a two- or three-week unit of study on the environment.

Intended User Characteristics

No reading or arithmetic skills are required. Students should be willing and able to put themselves into the role-play situation. Effective role play is critical to the success of this game. Students need enough room and freedom of space to conduct private negotiations with other participants.

Rationale and General Objectives

This game has been developed based on the contention of the game designer that creating pollution controls and achieving environmental quality of life are difficult and complex problems. Dr. Twelker lists the general objectives of the game in the Coordinator's Manual. The game will: 1) orient participants to the increased emphasis being placed by our own society on the environment and quality of life; 2) provide participants with an opportunity to understand some of the problems of air, water, land, and visual pollution, as well as the principal interests at stake and their relationships to each other; and 3) provide an opportunity for participants to experience the trade-offs between personal/corporate goals and environmental quality. Students become aware of the complexity of environmental problems by illustrating the diverse views that different people have due to their positions and roles in society. Students realize how self-interests clash with environmental concerns and become aware of means to resolve these conflicts. In the process, students become well acquainted with arguments that are used to support various points of view and develop understanding of why pollution controls are costly and difficult to achieve.

Content

Four players or teams of players assume roles of Business and Industry, State Government, Citizens, and Conservationists. As they play their roles, the students negotiate to reach agreement about specific environmental issues. They try to attain satisfaction points while they attempt to maintain the environmental quality of life at the best possible level. Issues range from "Should oil companies be allowed to lease off-shore land and explore for oil?" to "Should nonreturnable bottles be banned from being distributed by bottling companies?" Since the emphasis of the game is on the complexity of human interaction as people of diverse interests try to resolve environmental problems, the developer suggests that it is perfectly appropriate for participants to develop game issues that are personally relevant to them and their local communities. Game issues that students devise can actually strengthen the substantive concerns of the game. Participants may also add to the significance of their game experience by experimenting with different voting odds, revision of the power balance between the four roles, and addition and substitution of roles.

Procedures

With the help of the overhead transparencies provided, the teacher first acquaints the students with the nature of each of the four game roles. After distributing the game charts and issue cards, he asks the students to look at the first issue card and begin to negotiate with the other members of their group. Each participant assesses his role, determines what his stand on the issue will be, and tries to negotiate with the other players in an effort to attain his personal and/or corporate goals. At the end of approximately five minutes, the negotiations cease and each player votes on the issue that was being discussed in order to determine what action or stand the group can agree to take. After all the players have cast their votes, the results are tabulated and the consequences determined by looking at the charts printed on the back of the issue card. The consequences are recorded on both the "Quality of Life" and the "Personal/Corporate Satisfaction" charts. A new issue card is then taken and a new negotiation process begins. The game may be ended when the "Quality of Life" begins to increase or decrease steadily. In the debriefing session, each participant tries to analyze the interactions that led to the conditions which existed at the time the game was terminated. The developer suggests that the teacher stop the game for brief student discussion whenever the "Quality of Life" is being noticeably affected. After a few moments of analysis to emphasize the effects the various societal interests are having on the environment, the teacher can have the game play resume.

Evaluative Comments and Suggestions

It is possible, through use of supplementary materials, for students to acquire information about the scientific aspects of environmental problems as they play this game. That, however, is not the game's main purpose and the materials themselves only incidentally include scientific information. Since the emphasis is on the complexities of human and societal interaction concerning environmental problems, game success depends greatly upon the extent to which the student participants become involved in their roles. Sometimes, however, student involvement can pose problems. For example, opinion surveys are taken at various times during the game. Each participant is asked to give his opinion as to how effective the Conservationists, Citizens, etc., are in fulfilling their roles. This process may cause injured feelings among the players. Again, the game is most effective when used as an integral part of a unit of study.

PORTSVILLE

Developer:	**High School Geography Project Association of American Geographers**
Publisher:	**The Macmillan Company School Division 866 Third Avenue New York, New York 10022**
Publication Date:	**1969**
Availability:	**From publisher**
Grade Level:	**10 (7-12)**
Subject Area:	**American History, Geography, and Urban Studies**
Number of Players:	**4-24**

Overview

Portsville was developed by the High School Geography Project (HSGP) as one of the learning activities in *Geography in an Urban Age*. Groups of students, using modulex boards and plastic building blocks, are asked to design a city during three different historical time periods. Although Portsville's development follows the general outline of the growth of Seattle, Washington, students are encouraged to build their own cities, rather than replicate Seattle's growth. In order to do this adequately, students are required to apply knowledge of settlement, historic city growth, and patterns of urban land use. *Portsville* is a simulation rather than a game, since there are no winners or losers.

Materials and Cost

Materials Package:

Portsville Map Package: 1 plastic modulex board of Portsville, 19¼" x 23¼", scale 1:24,000; 1 land-use key card; 3 trays of plastic building blocks, railroad strips, date cards, and inventory sheets, 1850-1880 (Tray 1), 1880-1890 (Tray 2), 1890-1900 (Tray 3); 1 light green perforated plastic sheet; 1 dark green perforated plastic sheet; 1 plastic fork for attaching perforated sheets to overlay; 1 teachers inventory and direction sheet

Total Package $45.75

Coordinator's Manual: (from Unit I, *Geography of Cities* in *Geography in an Urban Age*) 123 pp., 8½" x 10", paperbound; only pages 39-57 deal with *Portsville*; includes major parts of the activity, list of materials, learning objectives, and guidelines for conducting the activity $ 1.50

Student Manual: 147 pp., 8½" x 10", paperbound; only pages 25-45 deal with *Portsville*; includes background and pictorial information about Seattle (Portsville) $ 1.50

See Materials and Cost in High School Geography Project, *Geography in an Urban Age* Data Sheet

Required or Suggested Time

Portsville was designed to be conducted in eight to ten class periods. When used outside of the curriculum, *Geography in an Urban Age*, it might require one or two additional class periods to acquaint students with the geographic concepts of settlement location, city growth, and urban land use.

Intended User Characteristics

Although *Portsville* was originally developed for 10th-grade students, it can be used with younger and older students. Participants should have previous experience with the geographic problems inherent in urban development, and should have already studied U. S. history. In general, an 8th-grade reading level is desirable, but students with lower reading levels can participate in building the city. Map reading skills are highly desirable for participation. The teacher does not need extensive training in geography, but should be familiar with the entire unit from which *Portsville* is taken. *Portsville* should be conducted in a room equipped with tables large enough to accommodate the modulex board and chairs for five or six students.

Rationale and General Objectives

This simulation was designed to allow students to apply previously learned concepts. As participants build Portsville in three historic time periods, they must make decisions based on geographic and historic data. Students should gain a substantial understanding of urban growth and be able to transfer these learnings to observing and analyzing growth in their own community. Specifically, students who have participated in *Portsville* should be able to: predict where various types of urban land-use are likely to be located, and why this is so; explain relationships between environmental factors, such as rivers, and the location of industry; explain population growth and/or decreases; understand how human endeavor and fortunate events affect city growth; and demonstrate how people have modified physical environments and/or adapted to them.

Content

Background information about the settlement and subsequent growth of an American city is presented in narrative and pictorial form. Using this information, student groups construct maps of the city as they visualize it might have been in 1880, 1890, and 1900. In order to construct the city map for 1880, participants must consider the physical environment and historic events such as the discovery of gold in California and a growing demand for lumber. Following the map construction, an analysis session is held to determine why different student groups designed the city in different ways. Following this, additional narrative and pictorial information about the city, such as Indian troubles and the possibility of a railroad coming to Portsville, is made available to the participants. Groups then construct a map of the city as they think it was in 1890. After a second analysis session is conducted, historic information covering the decade 1890-1900 is read by the students. Using this data, student groups construct a third map of Portsville as they imagine it was in 1900. Following the final analysis session, students are informed that Portsville is really Seattle, Washington. The simulation is culminated by a presentation of United States Geological Survey maps of "Seattle and Vicinity" which show the development of Seattle between 1900 and the present day.

Procedures

Procedures for conducting *Portsville* are very closely aligned with the content of the activity. Students should be required to read the relevant background sections in the student resources book. Following the readings, students are divided into four groups and each group is provided with a modulex map and building materials. Participants should be given at least three class periods in which to construct and analyze maps of Portsville for 1880. The analysis session is conducted by the teacher with the entire class taking part. Each group presents its map and rationale to the rest of the class. This cycle is repeated for 1890, but because of increased knowledge and skill, the second map construction and analysis can be completed in approximately two days. An additional two days is ample time in which to develop and analyze maps for 1900. An important function for the teacher is that of asking probing questions to encourage students to examine the background information and apply previously learned concepts of urban development. Adequate time must be allowed for debriefing and analysis.

Evaluative Comments and Suggestions

Although *Portsville* is a simulation and not a game, it does involve students in an atmosphere of competition as each group attempts to develop the "best" map of Portsville. This activity is an excellent experience to accompany an analysis of local land-use patterns. A local United States Geological Survey map can be used instead of Portsville. This strategy should be employed after using Portsville.

Teachers must allow students adequate time to develop and analyze maps for each period, and permit students to talk freely with one another and move about.

References

Risinger, C. Frederick. "High School Geography Project." *Social Studies Curriculum Materials Data Book*. Book Colo.: Social Science Education Consortium, Inc., 1971.

POWDERHORN

Developer: R. Garry Shirts
Publisher: Simile II
1150 Silverado
La Jolla, California 92037
Publication Date: 1971
Availability: From publisher
Grade Level: 5-8
Subject Area: History and Political Science
Number of Players: 18-35

Overview

Powderhorn is the elementary school version of *Starpower*. Students assume the roles of frontiersmen and establish a three-tiered society through the process of trading items common to the frontier such as rifles, traps, and pelts. The game is structured so that a few participants receive more valued things than other participants. Thus, the simulation usually ends in a revolt. The content focus of *Powderhorn* encourages students to explore the dimensions and uses of power. Procedures for conducting the simulation are carefully spelled out and should be followed precisely. Debriefing is critical to establishing useful learning from participation in the simulation.

Materials and Cost

Materials Package:
Cardboard box, 8½" x 11" x 2", contains the following:
Coordinator's Manual: 12 pp., 5½" x 8½", stapled paper cover; includes overview, suggestions for planning simulation, rules, and debriefing questions
Additional Materials: trading cards (traps, rifles, pelts, hardtack, and gunpowder); bonus point cards (powderhorns); headbands (12 each circles, squares, triangles); scoring system wall chart; trading and bonus session rule cards
The developers state that minimal changes may be made in material format and packaging.

Total Package	$12.50

Required or Suggested Time

Usually *Powderhorn* can be played in one and one-half hours. The length of time to play the simulation can vary depending on how long it takes the two lower tiers of the frontier society to revolt or defy the rules established by the top tier of the society. The Coordinator's Manual suggests that 45 minutes be devoted to debriefing and class discussion.

Intended User Characteristics

Students engaged in the simulation are required to use very simple arithmetic skills. No student reading is required. The simulation demands a considerable amount of classroom activity and assures a high level of involvement. Literature from Simile II indicates that the teacher should feel comfortable in "managing vigorous intellectual and interpersonal classroom activities." In order for the simulation to run smoothly, the classroom should have movable chairs which can be set up in three circles.

Rationale and General Objectives

The implicit rationale of *Powderhorn* is that students should confront issues dealing with rule-making and the uses of power. According to the developer, the simulation ties in well with the study of the American frontier and can be used to explore the meaning of democracy, the uses and abuses of power, and the feeling of minority group members. The debriefing questions in the Coordinator's Manual ask the students to focus on a study of rules people use to govern themselves and the effect rules have on people. The Coordinator's Manual states, "The most significant principle that can be learned from the discussion [following the simulation] is that the rules that govern a people and the process that created the rules affect how people react to those rules, as well as to one another."

Content

In *Powderhorn* elementary students simulate a frontier society. The simulation design requires the establishment of a three-tiered society in which the strata are developed by trading items common to frontier life such as traps, rifles, hardtack, gunpowder, and pelts. After the first trading session the three tiers of the society are established. With few exceptions there is no mobility among the tiers. After the second round of trading the group in the highest tier, called squares, is given the power to establish any rules they wish for the game. The other two tiers can offer suggestions, but the highest tier has no obligation to accept the suggestions. After two or three rounds it becomes clear the squares are winning and that the other two groups have no chance for progress. It also becomes clear that any group given absolute power in a competitive system will use that power for its own benefit. Revolt is, therefore, usually the result of the capricious and selfish behavior of the powerful. The teacher will have to prepare carefully in order to tie in the simulation with main course content.

Procedures

In order to successfully begin the simulation, students must learn the point system used for accumulating rifles, gunpowder, traps, etc. Once students understand the scoring system, the rules of trade are presented. It is important that the rules be followed exactly. Following the presentation of the rules, the first trading session begins. Students actually move about the room to trade cards representing the frontier items. At the end of the trading period (ten minutes), students tally their points and collect into three groups determined by point totals. Headbands signifying the group label (squares, circles, triangles) are distributed. When each group is gathered in its own tier, bonus cards (powderhorns) are distributed. Each tier group is then asked to distribute the bonus cards according to established rules. Those collecting bonus points can move up to another tier group if their new point total exceeds the lowest point totals of members in a higher group. Those with low total points in the higher groups are then demoted to lower tier groups. Following the first round of trading and bonus point allocation, the coordinator secretly rigs the trading cards for ensuing rounds. After a second round of trading and bonus point allocation, the squares are given the power to establish the rules of the simulation. The simulation ends when the two lower tier groups revolt in some way. It is important to thoroughly debrief the simulation as soon as possible after the revolt. A number of useful questions to initiate debriefing are provided in the Coordinator's Manual.

Evaluative Comments and Suggestions

According to the developer, *Powderhorn* has been played with a wide variety of different groups. The results are essentially the same—there is some kind of revolt because of the use and consequent abuse of power. In this analyst's opinion, *Powderhorn* is a useful and exciting simulation, although there are a couple of cautions. First, the teacher must be prepared to cope with the high level of activity generated and to follow the rules prescribed. Second, it is necessary to give thoughtful consideration to the placement of the simulation in the curriculum plan.

PROPAGANDA

Developers: Robert W. Allen and Lorne Greene

Publisher: Wff 'N Proof Publishers
1111 Maple Avenue
Turtle Creek, Pennsylvania 15145

Publication Date: 1966; Revised 1969

Availability: From publisher; also available from many commercial outlets

Grade Level: 7-12 (Adults)

Subject Area: Interdisciplinary
Behavioral Science, English, Logic, Political Science, Psychology, and Sociology

Number of Players: 4

Overview

Propaganda is based on the book *Thinking Straighter* by George Henry Moulds. Developed by Robert W. Allen and Lorne Greene, the game was tested and refined in the Nova Schools, Ft. Lauderdale, Florida. *Propaganda* is an instructional game based on approximately 50 propaganda techniques. It is designed to develop clear thinking. According to the authors, the game will "help participants distinguish between the emotional aura surrounding an idea and the actual content of that idea." Students learn propaganda techniques and then apply them to propaganda examples prepared by the authors. Once students become familiar with the examples, they can play the expert's game which is described in the manual.

Materials and Cost

Materials Package:

Plastic box, 6" x 4¼" x 1", contains the following:

Coordinator's Manual: *The Propaganda Game*. By Robert W. Allen and Lorne Greene. 71 pp., 4¼" x 5½", paperbound; includes rationale, directions for playing game, explanation of *Propaganda* techniques, and the authors' answers to the *Propaganda* examples

Additional Materials:

One score chart, 8½" x 11", plastic; 4 technique prediction dial cards; 40 technique example cards, each containing 6 examples

Total Package $6.00

Required or Suggested Time

Length of play is determined by setting a score goal or an arbitrary time limit. At least one hour will be necessary for learning the techniques, although these techniques can be learned outside of class time.

Intended User Characteristics

The game can be played by students who read at a 7th-grade level. Math is used only for a simple score-keeping process. *Propaganda* can be played in the average classroom with no additional equipment. No special teacher training is necessary.

Rationale and General Objectives

The authors of *Propaganda* believe that American society uses propaganda increasingly to mold the minds of people. Since the formation of opinion or decisions about what course of action to take is often influenced by propaganda, the individual citizen needs to be aware of various techniques used and how such propaganda techniques can influence one's thinking. This awareness will help the individual to distinguish between the meaning of an idea and the emotional terms in which it is couched. Thus, the major objective of *Propaganda* is to introduce the student to techniques which are used by the communications media and others to distort clear thinking.

Content

Students encounter the following propaganda techniques which are used frequently by communications media: techniques of self-deception, techniques of language, techniques of irrelevance, techniques of exploitation, techniques of form, and techniques of maneuver. Within each of these areas, eight to ten different types of techniques are specified. For example, under the heading of techniques of self-deception, categories are included which are called "prejudice," "academic detachment," "drawing the line," "not drawing the line," "conservatism," "rationalization," "wishful thinking," "tabloid thinking," "causal oversimplification," and "inconceivability." Because of its emphasis on the use of language, the content of *Propaganda* lends itself to use by English usage classes, as well as social studies classes.

Procedures

Students may work individually, or in teams of two or three. Larger teams than this can make the decision-making process lengthy and unwieldy. The teacher must first make the students aware of the definition of each of the techniques used in the game. Examples of each category are given so that students may more readily identify the techniques. Propaganda techniques are read from the example cards, and students make predictions as to what the authors have labeled the example which was read. Scoring depends on several factors, such as the number of players who agree on the prediction, and the ability of a player to influence the thinking of other players. A gaming process called "bold challenge" enables students to discuss and argue the merits of their choices. After the correct answer has been given and student scores have been recorded, the next example is read. When the class has encountered all the examples of a particular technique, the students can move on to the next technique. When they have heard all the examples, they can then be introduced to the expert's game in which students use newspapers, radio and television advertising, and other media to develop their own examples. The role of the teacher is negligible and students can play without any teacher instruction.

Evaluative Comments and Suggestions

Propaganda requires students to make predictions about how the authors have labeled the examples. The game develops skill in identifying propaganda techniques. Students may find it difficult to remember the definitions and examples of various techniques. The teacher can facilitate this problem by duplicating a list of these definitions and examples in brief form and giving each participant a copy. The score chart which comes with the game is too small for use in the classroom; however, use of an overhead projector or blackboard can serve as an effective substitute.

PURSUIT

Developer: **Abt Associates, Inc.**
Publisher: **Reader's Digest Services, Inc.**
Educational Division
Pleasantville, New York 10570
Publication Date: **1970**
Availability: **From publisher**
Grade Level: **7-9**
Subject Area: **American History and Civil Rights**
Number of Players: **6-30**

Overview

Pursuit is an instructional game designed by Abt Associates, Inc., to accompany the Reader's Digest Resource Packet, *Pursuit: The Black Man Strides Toward Equality*. However, the game can also be played independently from the Resource Packet. *Pursuit* explores the existence of opportunities for blacks in the areas of housing, public accommodations, jobs, education, and suffrage in varying regions of the United States, during the civil rights involvement from 1954 to 1968. The student's ability to compete successfully in the game is augmented by his knowledge of the background of the struggle for racial equality in America, particularly with respect to national legislation and court decisions. The Reader's Digest Resource Packet supplements the game with extensive information about various aspects of the civil rights movement. The individualized multi-media materials in the Packet encourage pupils to examine boycotts and other forms of protest, and include both biographies of civil rights leaders and case studies of individual attempts to overcome discrimination. Both the game itself and the Resource Packet are particularly suitable for junior high school age students.

Materials and Cost

Materials Package:
  Cardboard box, 24" x 12" x 2", contains the following:
  Coordinator's Manual: 8 pp., 6" x 9", stapled paper cover; includes rationale, explanation of the game, and suggested follow-up activities
  Student Manual: 4 pp., 6" x 9", stapled paper cover; includes rules for the game
  Additional Materials: 35" x 23" cardboard playing board; 1 score pad; 1 outcome wheel; 12 demonstration cards; 6 playing tokens; 1 pair of dice; 1 calendar of events
 Total Package $35.00
Resource Packet:
 Student Packet: 13" x 10"; includes 8 oversize wall sheets, 5 booklets, 2 guide sheets; can be purchased in sets of 10, including one free Teacher's Manual $ 3.00
 Teacher's Manual: 31 pp., 8" x 10", stapled paper cover; provides background information on the civil rights movement, suggestions for teaching strategies, and suggestions for additional reading and study $ 1.00
 Audio Dramatization: available on record, reel-to-reel tape or cassette; includes an interview with Whitney Young and a case study of the Montgomery, Alabama bus boycott; instructional guide $ 5.50
 4 Overhead Transparencies: with teacher instructions, statistical information on black achievements in the areas of civil rights $ 4.95
 Total Package $40.45
 Total cost for both packages, if purchased together $67.90

Required or Suggested Time

The game is designed to be played in three to four 50-minute class periods. This time allotment includes preparation exercises, game play, and post-game discussion. Use of materials provided in the Resource Packet requires an additional week of classroom time.

Intended User Characteristics

The game and the Resource Packet have been designed for junior high school students. Only simple reading and arithmetic skills are required to play the game. If the game is purchased and used without the Resource Packet, the students should have some background information on the U.S. civil rights movement. *Pursuit* can be played in the average classroom with no additional equipment other than a large table. No special teacher training is necessary, although some background in American history with particular emphasis on the civil rights movement would be helpful.

Rationale and General Objectives

The developers state that "The game is designed to teach students the factual history of the civil rights movement and to help them understand the social changes in America during the last 15 years." By placing students—and especially white students—in the roles of young black Americans, the game encourages participants to discover for themselves how they react to various forms of discrimination. Students realize that government legislation and judicial decisions do not necessarily produce instant social change or easily reduce various forms of racial prejudice. In addition, the Resource Packet invites students to examine these questions: Has the United States begun to change itself with regard to racial equality before the law? If so, how is this change being brought about? What are these mechanisms of change, what are the forces that promote change, and on the other hand, what are the forces that retard and prevent change?

Content

Pursuit examines the impact of the civil rights movement upon the goals of individual black Americans. Players assume the roles of six young blacks who must determine achievement goals in the areas of housing, voting, public accommodations, vocations, and education. For example, in housing, participants must choose suitable living accommodations from a large range of options extending from renting an urban slum apartment to owning a suburban home in a fully integrated neighborhood. Scoring is based on the student's ability to determine correctly the different effects that the conditions in various regions of the U.S. at a particular time will have on the opportunities available to him. Scoring is thus based upon the student's ability to establish and achieve realistic goals. Included in the game are descriptions of major historic legislation, court rulings, executive orders, riots, and other events relevant to the problems, setbacks, and achievements of the civil rights movement in the United States.

Procedures

Participants begin by dividing into groups, with each group (or individual player, if only six participants are playing) representing one of six blacks. Two black players are initially assigned as residents of the south, midwest, and north sections of the United States. Each participant then decides what his goals will be in each of the five areas—housing, voting, public accommodations, vocations, and education. Each student's assessment of feasible goals is to be based upon his analysis of the changing social conditions, attitudes, and events of the years during which play takes place. With the throw of the dice, players land on circles that allow them to choose within that time span and geographical location whether or not they wish to try for the goals they have set for themselves in any one of the five categories. Players rotate turns; after two turns, the years during which the participants are supposed to be living change. As years pass, players have greater opportunities to achieve higher goals, and in special instances can change their goals upward to try to achieve more points. Located on the board are special areas where players are provided opportunities to change their geographical location, perform civil rights demonstrations, and re-establish their goals. The game ends when each participant has moved 12 times, representing a time span of 15 years. Scoring is primarily based on how accurately the players meet their goals. Players are penalized for achieving goals higher or lower than anticipated. The winner of the game is the player or group of players accumulating the greatest number of points.

Evaluative Comments and Suggestions

Pursuit requires students to utilize historical information about the civil rights movement in order to establish realistic goals and compete more successfully in the context of the game. Students may have difficulty maintaining interest in the game, particularly as they await their turn at the die. Incorporation of the game within a unit of study, thus providing students with greater awareness and understanding of the slow and tedious development of minority rights in America, will increase the effectiveness of the game's use. Using the Resource Packet heightens the game's success. Although *Pursuit* can be useful with high school students, it is normally more effective with junior high school age students.

QUERIES 'N THEORIES

Developers:	**Layman Allen, Peter Kugel, Joan Ross**
Publisher:	**Wff 'n Proof Publishers 1111 Maple Avenue Turtle Creek, Pennsylvania 15145**
Publication Date:	**1970**
Availability:	**From publisher**
Grade Level:	**7-12 (Adults)**
Subject Area:	**Scientific Method and Linguistics**
Number of Players:	**2-6**

Overview

Queries 'n Theories is actually a number of games, each of which has been designed to improve student skills in asking questions. Although the games are simulations of the scientific method applied to linguistics, their use is generalizable to all systematic inquiry. The premise upon which each of the games is based is that an effective querist must be a good theorist as well. In order to reach a workable hypothesis which can accurately describe a system, the theorist must search for critical questions which will give him the information he wants. Secondly, he needs to be able to interpret the responses to his questions in order to perceive an organized pattern. *Queries 'n Theories* provides practice in these processes as well as experience with Chomsky's theory of functional linguistics.

Materials and Cost

Materials Package:

Plastic booksized box, 8½" x 5¾" x 1½", contains the following:

Coordinator's Manual: 54 pp., 5¼" x 8", stapled paper cover; includes programmed text for learning the game, sample games, variations, and theoretical interpretations

Additional Materials: 2 "Native" mats; 9 "Query" mats; 1 "Query" marker; 1 timer; 80 each of blue, green, red, and yellow chips; 40 purple chips; 120 white chips

Total Package $8.75

Required or Suggested Time

The game is organized into levels of complexity; the game time varies according to the level at which it is played. The simpler levels may be played in approximately one hour.

Intended User Characteristics

Queries 'n Theories is an abstract game appropriate to 7th-grade and older players. It does not require much reading, but players must have an understanding of elementary logical reasoning to play it effectively. As a small group game, it may be played competitively or as an exercise in cooperative information sharing. A table, chairs, and a blackboard are the only equipment needed to play the game. The philosophy of all the Wff 'n Proof games is that the teacher is not to be the final authority in the game. The teacher in *Queries 'n Theories* becomes a coach, helping to clarify but not to give final rulings. The justifications and corrections remain with the players themselves.

Rationale and General Objectives

Queries 'n Theories is based on the developers' belief "that the skill and insight achieved from recurring practice in theorizing and constructing Queries in the game will prove relevant for enhancing talent in scientific theorizing and experimental design. Asking the right questions is perhaps the most significant step toward the solution of any problem." On the most general level, the game is aimed at having students recreate the conditions which stimulate the use of the scientific method; that is, a researcher takes phenomena from nature and, having constructed a series of experiments or queries, reasons inductively to acquire an understanding of natural laws. Because a grammar is a set of hypotheses about the way language works, the game has students apply the process to Chomsky's theory of linguistics. Thirdly, *Queries 'n Theories* is designed to challenge students to be more effective in exercises of pure pattern recognition.

Content

This game focuses primarily on the simulation of scientific method. The emphasis is upon learning to apply reasoning skills to theoretical problems by recognizing possible causes and effects in relation to larger patterns.

Procedures

The scenario is of anthropologists-linguists who, upon stumbling into a remote village, must decode the native language to survive. There is one native per group of querist-theorists. The native has a mat upon which he devises the rules of his "language" using various colored chips. The complexity of the "language" is determined by the total number of chips used, the number of different colors, and the way that the chips are distributed into the categories of basic sentences and replacement rules which allow elaboration in the language.

To gather evidence about the "language," the querist-theorists construct queries in the form of strings of chips on their own mats. Each of these strings is a question to the native as to whether a given sentence is possible given the rules of the language. Using a green or red chip to mark his response, the native can only answer yes or no.

The querist-theorists' real job is to understand what they are asking, so that when they are told whether a sentence is meaningful they will know what its implications are in terms of their theories. Their reasoning includes hypotheses about how a given sentence might be generated. For example, what possible rules would allow this sentence to exist? The querist-theorists may construct two different levels of questions. The simplest kind are the "weak" queries which deal only with specifics. At higher levels, a "strong" query uses white chips to pose more general questions about patterns. These are more sophisticated queries because they can eliminate many more possible theories in one step. The number of chips allowed in any single game is determined by the number of chips used in the language. The greater the number of chips implies more possible sets of rules and, consequently, more necessary questions.

When a querist-theorist believes that he knows the rules of the language, he shouts, "Chomsky," and becomes a "linguist." At that point, the native will test him by composing three sentences which the other player will have to identify as correct or incorrect. All other players will have to decide for themselves whether there is enough information visible to understand the language. If they don't think there is, or if they don't know, they may side with the native. If they do think there is, they will side with the querist-theorist, giving their own responses to the native's queries. The querist-theorist and his team win points if they correctly identify the sentences. The native and his team get points if the querist-theorist makes mistakes.

Evaluative Comments and Suggestions

The two major complaints about this game are that it is too hard to learn and that it may be too abstract for most social studies classroom uses. To facilitate learning the game, it helps to have an experienced player to teach it because most people get bogged down in the detailed rule book. The manual is very complete with respect to the game itself, but it lacks suggestions about interpretations in non-scientific areas. Teachers who use it would have to use their ingenuity to give it initial relevance for social studies use. However, once players understand the basic logic of the game, they often find it fascinating as intellectual play with many potential variations and applications.

RADICALS VS TORIES

Developer:	**David N. DalPorto**
Publisher:	**History Simulations** **P. O. Box 2775** **Santa Clara, California 95052**
Publication Date:	**1972**
Availability:	**From publisher**
Grade Level:	**7-12**
Subject Area:	**American History**
Number of Players:	**24-100**

Overview

Radicals vs Tories is a "simulation of the struggle between those favoring close ties with Great Britain and those favoring independence during the American Revolution." Students assume the roles of representatives of the original colonies and take one of three positions—Radical, Tory, or Moderate. In accordance with historical estimates, Radicals and Tories each comprise 25% of the class and Moderates, 50%. The Radicals and Tories attempt to persuade as many Moderates as possible to join them in voting on the proposal to go to war against Great Britain. The simulation promotes student understanding of the historical situation of the American Revolution and of the pull and tug of interaction among conflicting viewpoints.

Materials and Cost

Materials Package:

Coordinator's Manual: 20 pp., paperbound booklet with removable plastic binding; contains overview; procedures; schedule; Teacher Information Sheet; student fact sheets on the background of the American Revolution and the immediate problem; role sheets for Radicals, Tories, Moderates, and Section Leaders; Sectional Leader Voting Record Sheet; Master Roll Sheet; Supplementary Master Role Sheet; Teacher's Voting Score Sheet; Final Day Scoreboard sheet; and Messages

Total Package	$10.00

Required or Suggested Time

These materials were designed for three class periods of approximately 50 minutes each. A fourth period should be set aside for an explanation of the simulation and the distribution of roles.

Intended User Characteristics

For maximum utility of this simulation, a strong student background in the American Revolution is most helpful. The teacher should cover the period prior to the Revolution during the weeks immediately preceding the simulation. Wherever possible, teachers should combine two or more classes in order to play the simulation. Experience has shown that a much more stimulating atmosphere develops when a larger number of students is involved. Four separate meeting areas should be made available for section meetings; although not absolutely necessary, this would offer definite advantages.

Rationale and General Objectives

In *Radicals vs Tories*, the developer uses role playing to achieve the following objectives: "1) Students will learn some of the basic causes of the American Revolution; 2) Students will become involved in a meaningful activity which gives them a greater insight into the reasons why it is so difficult not to take sides in a struggle between two strong points of view; 3) Students will understand that the movement for independence was not unanimous, that there were many powerful arguments both on the side for independence and on the side for conciliation; 4) Students will have to make decisions which require them to weigh a vast number of considerations."

Content

The setting for *Radicals vs Tories* is the Second Continental Congress, in mid-1775. Fighting between the colonists and the British had been going on for some time, but up to the point at which the simulation begins, it had been considered only a civil strife conducted by a poorly organized, ill-trained, and underfinanced minority of the colonists. The participants, representing Congress, must decide whether to remain within the British system or to declare independence. Students take the roles of

Radical, Tory, and Moderate delegates to the Congress from the 13 colonies. In sectional meetings, Radicals and Tories attempt to persuade the uncommitted delegates to join their respective sides. Radicals and Tories present their arguments to illuminate the advantages and disadvantages of remaining a British colony. They develop strategies for winning over crucial segments of the colonial delegations. The Moderates must weigh the conflicting arguments, carefully question those pressuring them from both sides, and decide how to vote on the question of independence. On the final day of the simulation, after formal debate, a vote is taken in the Continental Congress.

Procedures

After students have become familiar with their roles, they are divided into sections. Radicals and Tories are each divided into two equal panels. Moderates are assigned to one of four sections—Northern, Middle, Mid-South, and Southern—depending upon the colony to which they have been assigned. The first two days involve strategy meetings of Radicals and Tories, sectional meetings of Moderates, and sectional meetings in which Radicals and Tories attempt to persuade Moderates to their points of view. After each of the latter meetings, the Moderates vote on the question of which side they will support. They may abstain, and they may vote differently each time. On the last day of the simulation, all the delegates meet together to hear formal arguments from representatives of the Radicals and the Tories. After the presentations have been completed, the 13 colonies vote on their preferences. At this point, no delegates can abstain. Whichever side gains seven or more colonies is considered the winner. The final 15 minutes of the third day is designated "Evaluation" in the Coordinator's Manual. The procedures and content for this debriefing period, however, are not indicated.

Evaluative Comments and Suggestions

This simulation seems very promising as a culminating activity at the end of a unit dealing with the causes of the American Revolution. *Radicals vs Tories* is extremely explicit in the description of procedures necessary for conducting the simulation; however, no debriefing and evaluative instructions are given. The teacher will have to develop his own methods for helping students relate their experiences both to the American Revolution and to present day situations. Since the concepts, relationships, and skills underlying the simulation are not explicitly elaborated beyond the objectives given in the Coordinator's Manual, these tasks will probably require some extra time and thought. The teacher may wish to modify the fact sheet readings for younger or less able students. One possible weakness of *Radicals vs Tories* lies in the fact that students will already be aware of the outcome of the colonists' vote. This factor might influence their own voting.

THE REDWOOD CONTROVERSY

Developer:	**Frederick A. Rasmussen** **Educational Research Council of America**
Publisher:	**Houghton Mifflin Company** **110 Tremont Street** **Boston, Massachusetts 02107**
Publication Date:	**1971**
Availability:	**From publisher**
Grade Level:	**7 (8-12)**
Subject Area:	**Geography, Political Science, Science, and Contemporary Problems**
Number of Players:	**9-36**

Overview

Developed by Frederick A. Rasmussen while with the Educational Research Council of America, this simulation game highlights conflicting ecological, sociological, and political issues that develop over a question of land ownership and land use. The game is based entirely on research of the proceedings which led to the actual establishment of the Redwood National Park. Students assume roles as conservationists, lumbermen, and other experts to testify before a Senate committee. Other students assume roles as senators and have to determine the size of Redwood National Park. The decision each senator makes affects his chance for re-election. The simulation is concluded when any of the proposals regarding the Redwood National Park receive a two-thirds vote of the senators.

Materials and Cost

Materials Package:

Cardboard box, 11½" x 9" x 1½", contains the following:

Coordinator's Manual: 4 pp., 8½" x 11"; includes an introduction to the game, a brief history of the redwood controversy, teaching suggestions, rules for participants and post-game discussion questions

Additional Materials: 15 senator profile cards, 15 senator identification cards, 6 witness profile cards, 6 witness identification cards, 1 rules for Senate Leader card, 1 map showing the redwood area to be purchased under three different proposals, 1 election ballot transparency, 1 election spinner

Total Package	$7.50

Required or Suggested Time

No specified amount of time for use of this simulation game is suggested by the developers. Introductory briefing time requires 30 to 40 minutes. Playing time can be regulated by the coordinator. One to two hours is sufficient for students to understand the conflicting issues that form the basis for the simulation. Playing time can be altered by lengthening or shortening the 15-minute discussion recess, changing the number of witnesses, and controlling the exchanges between witnesses and senators. Debriefing time can vary; however, one hour is usually adequate for this purpose.

Intended User Characteristics

This simulation was designed specifically for use by 7th-grade students; however, it is suitable for students at the secondary school level, including those who have academic difficulties. According to the developers, some aspects of the actual redwood controversy "have been omitted to scale the game down to the level of students' sophistication." Students need to read their profile cards prior to beginning the simulation. The Senate Leader conducts the committee hearing and should have some management abilities. Witnesses need to make brief oral presentations and answer questions. No special training for teachers is necessary. Some background in political procedures and environmental issues, particularly the redwood controversy, would be especially helpful during the debriefing. The classroom is arranged as a Senate hearing room with students in a semi-circle facing witnesses who testify.

Rationale and General Objectives

According to the developers, *The Redwood Controversy* is designed to help students understand issues involved in environmental planning. Students learn to bargain, compromise, and negotiate to resolve dynamic and complex public issues. Through their participation in the simulation, they see that "land use problems have conflicting ecological, sociological, and political components." By acting out their roles, students learn about some difficulties that can arise in attempting to resolve land use problems.

Content

The game centers on simulation of the actual efforts of the United States Senate to satisfactorily resolve a land use question based on conflicting claims of special interests during national controversy over the California redwoods. The developers explain that "the real issue of whether a Redwood National Park was in the public interest was often submerged in a mass of conflicting claims, and seemed of secondary importance to many of the participants in the dispute." Student roles as senators include positions that show competing state interests, advocate property rights, indicate the influence of friends, protect employment opportunities, and receive pressure from sportsmen. The special points of view represented by the six witnesses include those of a redwood forester, a lumber company president, a national park service planner, the mayor of a lumbering community, the president of a conservation group, and a professor of environmental science.

Procedures

Participants are assigned or select roles as the Majority Leader, 14 other senators, or six witnesses. They receive profile cards that indicate their expertise, personality, or the feelings of their constituents. Background information about the dispute is provided in the Coordinator's Manual and read to the class. The hearing is conducted by the Majority Leader who calls for the testimony of witnesses. After each presentation, senators may question the witnesses. Those who have already testified can also ask questions. After all witnesses have appeared, the Senate Leader asks each senator to state how he thinks he will vote. This is recorded on the election ballot as a "first choice." A recess is declared for senators to persuade each other to change their probable vote. After the recess, each senator casts his vote. Further discussions and votes are held until a proposal receives two-thirds of the votes. Each senator then spins the "Election Spinner" which indicates a 10%, 40%, 60%, or 90% chance of re-election. The result of each election is posted alongside the senator's vote. A class discussion of the facts that led to the settlement of the controversy is recommended after the final vote. The developers suggest that "the post-game discussion should focus on ways students can use their game experience to understand current events and to guide their future behavior as responsible, concerned citizens." Several questions are listed to explore students' understandings of the controversy.

Evaluative Comments and Suggestions

This simulation presents a timely and significant public issue in an exciting and easily understood manner. The intricacies of political procedures, the uncertainties in determining public interest, and the complexities of environmental issues all emerge realistically during the simulation. The number of roles can be increased or reduced, thereby adding to easy classroom adaptation. Substantial background information about the actual controversy is lacking, primarily because the developers thought it more confusing than helpful for 7th-grade students. Although the information which appears on the profile cards and in the Coordinator's Manual is based on actual research of the redwood controversy, in its final published form it is still limited enough that it frequently encourages participants to "create" their own, not always accurate, content. Additional, easily accessible sources of information are noted in the Coordinator's Manual. Much of the success of the simulation depends on the abilities of the Senate Leader. This person should be chosen with care. Procedures used in *The Redwood Controversy* can be adapted to explore other controversial issues. Many related activities can be undertaken as pre- and post-game learning experiences.

ROARING CAMP

Developer:	**Jay Reese**
Publisher:	**Simile II** **1150 Silverado** **La Jolla, California 92037**
Publication Date:	**1972**
Availability:	**From publisher**
Grade Level:	**4-7**
Subject Area:	**American History**
Number of Players:	**18-35**

Overview

Roaring Camp is a role-playing game intended to provide a springboard "for discussions about the California Gold Rush, life of the Old West, or the life and times of famous and infamous miners." Students are given an initial grubstake of $600, $400 of which must be paid to the Roaring Camp Mercantile Company during the first year (round) for supplies and equipment. The students file claims to various mining lands, and the teacher, consulting a secret "Master Map of the Goldfield," tells who has made strikes. The game is played for several rounds and students may accumulate debts or strike it rich. The game leaves most of the development of background information on this historical period to the teacher. Questions are suggested to stimulate group discussion, but some require a fairly extensive knowledge of American history or the California, Colorado, Australia, or Alaska gold rushes. Little reading and minimal arithmetic skills are involved.

Materials and Cost

Materials Package:

Heavy paper envelope, 9¾" x 12¾"; contains the following:

Coordinator's Manual: 11 pp., 7" x 8"; contains playing instructions, map of West Coast, "Master Map of Goldfield Payoff Chart," and discussion questions

Additional Materials: Two 33" x 22" mine plot maps, a ditto master of mining claim and contract forms, 39 sheets of play money in $50, $100, $200, and $1000 denominations

Total Package $10.00

Required or Suggested Time

The Coordinator's Manual suggests the game be played about 20 minutes per day for as many days as the teacher feels students are learning from the experience or until all the land is mined.

Intended User Characteristics

Roaring Camp is designed for students in grades 4 through 7. Very little reading is required. Students need only minimal skill in addition and subtraction and to be able to make monetary exchanges. Although the game is not explicitly designed for use with students who are emotionally disturbed or have learning disabilities, it appears to be appropriate for such students even at higher levels than 7th grade. The teacher needs substantial knowledge of American history, particularly of the Old West, of the California, Colorado, Alaska, and Australia gold rushes, and of the well-known characters in gold-mining history.

Rationale and General Objectives

The purpose of the game is primarily motivational—to introduce the era of the Westward Movement in American history "or the Colorado, Australia, or Alaska gold rushes by giving students an inkling of the excitement that the prospect of finding gold can wake." In addition to this affective goal, a Simile II pamphlet elaborates on some of the skills which students should learn in the course of the game: "students learn about the measurement and description of land, [and] experience the writing of checks and balancing a checking account. . . ." Beyond these few comments, the rationale and objectives are not elaborated.

Content

Roaring Camp places students in an Old West mining camp where they become inflicted with "Gold Fever." The students play roles of a banker, a claims officer, "Kind Hearted Kilroy" (who provides grubstakes at usurious interest rates), and miners. In each round, the miners file claims for plots delineated on large maps of Roaring Camp, or choose to continue mining their existing plots. Following play, the teacher can use the discussion questions suggested in the Coordinator's Manual to move the students into further study of Western American history. The questions include references to specific events of the simualtion, ask "broadening" questions which encourage students to draw on their knowledge of movie portrayals of the gold rush days, suggest outside readings, and sketch some additional activities such as a skit and a demonstration of gold panning.

Procedures

Only a small amount of teacher pre-game preparation is necessary to play *Roaring Camp*—duplication of the mining claim and contract forms and cutting apart the sheets of play money. The two Roaring Camp maps are placed where there is room for the students to gather around, and then the roles are assigned or chosen. After a brief explanation of the problem and the rules by the teacher, miners are each issued $600 by the banker, $400 of which they must immediately pay to the Roaring Camp Mercantile Company (RCMC) for supplies and equipment. In each subsequent year (one year equals one day's playing session), miners must pay $200 each for supplies and equipment maintenance for working their old claim or a new one. After paying the RCMC, the miners file their claims by filling out and turning over to the claims officer the appropriate forms and initialing their plots on the map. They may only work one plot at a time, and all plots are exhausted after five years. Once the claims have been selected, the teacher and a student assistant inform the miners of the success of their year's ventures, consulting the Master Map. The students jot down their earnings or losses, and on following days, succeeding years are enacted using the same procedure. If the students run out of money, they may contract with Kind Hearted Kilroy for a loan at 50% interest in order to continue the search for gold.

Evaluative Comments and Suggestions

Roaring Camp appears to be a quasi-simulation in that it does not require full-fledged role playing by the students, and the role identities are either not described at all (for the miners) or only sketchily indicated (for the banker, claims officer, and Kind Hearted Kilroy). However, there is ample leeway for students to build up imaginative characterizations of the miners if they wish, and encouragement of this would probably add greatly to the impact of the game. Depending upon teacher background in American history and upon teacher initiative in modification of the game, *Roaring Camp's* interest level might be adapted to slow learners in grades 7 through 9. The game shows good promise for use by children with reading and/or general learning disabilities as it does not depend on reading and has potential for raising such students' curiosity. The game's mathematical demands seem appropriate for emotionally disturbed/learning disability children in need of math remediation and math "fact" practice. It could serve a further purpose with emotionally disturbed children in that it involves them in a group situation fostering peer interaction and development of social skills.

SITTE

Developer:	**Western Behavioral Sciences Institute (WBSI)**
Publisher:	**Simile II** **1150 Silverado** **La Jolla, California 92037**
Publication Date:	**1969**
Availability:	**From publisher**
Grade Level:	**7-Adults**
Subject Area:	**Urban Problems**
Number of Players:	**18-25**

Overview

Sitte (pronounced city) is a simulation game designed to develop insights into the dynamics of municipal government. Students assume roles as members of one of five special interest groups and attempt to influence decisions regarding city planning and government. Group interaction plays an important part in *Sitte* and promotes high levels of affective learning.

Materials and Cost

Coordinator's Manual: 20 pp., 4¼" x 6", stapled paper cover; includes rationale, special background information, and instructions for the director-messenger, the analyst, and the mass media

Student Manual: 14 pp., 5½" x 8½", stapled paper cover; includes participants' instructions, answers to questions frequently asked by participants, group objectives, decision and status indicator forms

Classroom set of 25 including Coordinator's Manual	$35.00
Classroom set of 35 including Coordinator's Manual	$50.00
Sample set including Coordinator's Manual	$ 3.00

Required or Suggested Time

The game was designed to be played in three to four 50-minute class periods. Each round consists of three 15-minute periods. At least three rounds of play are necessary to arrive at the desired outcomes.

Intended User Characteristics

8th-grade reading skills are required. The analyst does simple arithmetic computations; this role can be assumed by the teacher or a student. Students need to have advance knowledge of what pressure groups are and how they work. The teacher needs no previous training to play *Sitte*.

Rationale and General Objectives

The developers of *Sitte* believe that the development of a model which simulates reality enables students to make decisions and to realize the consequences of those decisions. Through involvement, students experience actual situations and develop in-depth understanding of situations rather than superficial knowledge. *Sitte* is designed to have students develop understanding of the role of interest groups in the decision-making process of city government.

Content

There are five interest groups, each consisting of two to six members. These groups are called Business, Disenfranchised, Government, Ad Hoc Committee for Parks and Trees, and Taxpayers Association. Through their participation in assigned roles, students will learn about pressure groups, logrolling, dishonesty in government, the passing of proposals, and the difficulty of satisfying all interest groups. Additional roles are those of the director-messenger and the analyst, who work together as a team to manage the simulation, and the mass media, whose job it is to keep all interest groups informed. Affective content will teach students the importance of communication skills, as well as how to work within a group to make decisions and influence others.

Procedures

Participants are assigned to one of five groups and each participant receives a manual of instructions.

In the first decision period, groups decide how to allocate their influence. During this period, communication between groups is restricted to written messages. At the end of the decision period, the director-messenger collects the group decisions. The analyst computes the status of each group based on the decision forms and announces each group's status at the end of the second period. The second 15-minute period is a free period and communication between groups is not restricted to written messages. The decision period/free period pattern is repeated in subsequent rounds.

The mass media issues news reports, editorials, news releases from interest groups, and miscellaneous news items. The role of mass media is open-ended and can be honest, biased, pro or con for a particular group; it can be anything the players choose.

The instructer will have to play the role of analyst or help a student to do so to see that messages are delivered during the decision period.

After groups make decisions about proposals on which to spend their influence points, other interest groups approve or disapprove of these decisions. These proposals are then presented to the government for funding.

Debriefing can take the form of a discussion of what actually happened in the playing of the game or of an in-depth inquiry into how what occurred during the game relates to the problems of cities.

Evaluative Comments and Suggestions

Sophisticated understanding of city problems will depend on how extensively the teacher debriefs. The developers have designed a model which is fairly structured but students are allowed latitude in choosing action to take in the course of the game. It is helpful to have another teacher or advanced student assisting the instructor in order to facilitate the roles of analyst and director-messenger.

STARPOWER

Developer: R. Garry Shirts
Western Behavioral Sciences Institute (WBSI)
Publisher: Simile II
1150 Silverado Street
La Jolla, California 92037
Publication Date: 1969
Availability: From publisher
Grade Level: 10-Adults (7-9)
Subject Area: Political Science
Number of Players: 18-35

Overview

Recently developed by R. Garry Shirts for Western Behavioral Sciences Institute, *Starpower* explores the personal accumulation, use, and abuse of power. The game is structured so that a few participants receive a greater amount of high-value wealth chips than the other participants; these same few participants are also provided the opportunity to change the rules of the game to protect their consolidation of power. The purpose of the game is to have the rules break down, as the disenfranchised powerless participants realize that they cannot win within the structure of the rules and they react against their competitors who have abused the power which they had been given by the unequal distribution of wealth chips and privileges. *Starpower* encourages the students to explore the dimensions of power and competitive society.

Materials and Cost

Coordinator's Manual: 16 pp., 5½" x 8½", stapled paper cover; contains rationale, game procedures and rules, discussion questions, bibliography
No Student Manual
Additional Materials: plastic chips, wall chart, and durable name cards

Classroom set of 35 including Coordinator's Manual	$35.00
Do-It-Yourself Coordinator's Instructions	$ 3.00

Required or Suggested Time

Usually two or three hours are sufficient for playing the game and debriefing in group discussion. However, the length of time can vary depending upon how quickly participants perceive and defy the authoritarian and unequal distribution of chips.

Intended User Characteristics

This game can be effectively used by nonreaders and slow learners; no reading is required and calculations necessitate only simple addition. It is desirable to use a large room to arrange the participant's chairs into three groups; no tables are necessary. A large blackboard should be available for listing the players' scores. The teacher who wishes to use *Starpower* should be fairly knowledgeable about group dynamics and adolescent behavior, as the game can often have a strong emotional impact on participants, subtly exposing competitive aspects of their personalities.

Rationale and General Objectives

Starpower was designed to encourage students to explore the personal accumulation, use, and abuse of power in its intimate political relationship to a competitive, quasi-free market society. Students are expected to evaluate their own values with respect to striving for personal power and influence over others.

Content

Starpower is a hypothetical situation in which what the developers describe as a "low mobility three-tiered society" is structured around the distribution of wealth. Mobility is intentionally limited to the participants' chances to progress from one level of society to another by trading wealth chips with other participants. Once the society is established, the group with the most wealth is given the opportunity to reformulate the rules, which almost inevitably are authoritarian and designed to protect the dominant group's control of the game. The game finally results in breakdown in communication, trade, and formal order as discriminated players react against the unequivocal power distribution and authoritative rule-making of their more fortunate competitors. The natural development of discussion during debriefing concerns power and its often destructive potential when not wisely and humanely used for the benefit of those it affects.

Procedures

Participants are divided and grouped into three approximately equal-numbered groups which are labeled circles, squares, and triangles. Each player receives five chips which are of unequal value. The trading in the first round begins when participants exchange chips with each other to try to increase their points. Only "one for one" trades are legal; participants must shake hands or remain holding hands to consummate a trade. After the trading session ends, participants return to their groups and individual scores are tabulated. A bonus chip session follows in which groups must decide unanimously who within their groups will receive the bonus chips. Participants are then rearranged into three groups based on point scores. The cycle is repeated until participants understand that the group labeled "squares" has the high scores. The teacher then announces that, "because they have worked so hard," the squares have the authority to rewrite the rules of the game. Technically, the winners of the game are the three players who have accumulated the most points; however, the purpose of the game is to have the participants reject the structure of the game as they perceive its unfairness.

Evaluative Comments and Suggestions

Starpower offers players a unique opportunity to explore the concept of power and its implications for a highly-competitive society. It generates an extremely high level of student interest and involvement. The debriefing questions effectively encourage students to explore and develop modes of thinking and acting against inadequacies and injustice in contemporary American society, instead of simply accepting inequities with a fatalistic attitude.

SUNSHINE

Developers: **David Yount and Paul Dekock**
Publisher: **Interact Company**
Box 262
Lakeside, California 92040
Publication Date: **1968**
Availability **From publisher**
Grade Level: **9-12**
Subject Area: **American History and Contemporary Problems**
Number of Players: **20-36**

Overview

Developed by two experienced classroom teachers, David Yount and Paul Dekock, *Sunshine* is an inexpensive and easily-used simulation game which serves effectively as the basis for a three to four and a half week unit of study. The game combines traditional study of the history of the American Negro with a simulation experience that requires students to cope with the realities of racial problems in contemporary community life. *Sunshine* is well-suited for use with high school students. Teachers should have background in American history, particularly black history, and would also profit by having background in U.S. civil rights legislation and contemporary urban problems.

Materials and Cost

One 8½" x 11" booklet wtih removable plastic binding; booklet is designed as a guide for the teacher to use in producing the game materials; each page may be removed individually and duplicated for classroom use; booklet contains the following:

Coordinator's Manual: 31 pp.; includes rationale; overview; set-up instructions; time schedule; annotated bibliography; copies of all sheets used in the game, including Racial Attitudes Tests for both blacks and whites; a reprint from the *Saturday Review*, "The Environment of Language"; tests; a case study; a proposal for Sunshine city council; aids for students in planning a persuasive speech; simplification of parliamentary procedure; and an IMPS (image points) balance sheet

Student Manual: 2 pp.; includes information about the town of Sunshine and tasks to perform during the game

Total Package (One Booklet)	$10.00

Required or Suggested Time

The developers suggest that this simulation game be used for a period of from three to four and a half weeks of classroom time, assuming each classroom period is approximately 45 minutes long. They suggest that "less than ten days will be insufficient for involvement; five weeks will probably cause the experience to become stale." The Coordinator's Manual includes a suggested four and one-half week schedule for use of the game.

Intended User Characteristics

This simulation game is appropriate for use by high school students in grades 9 through 12; however, it could be modified for use with junior high school students. Research, study, and communication skills are emphasized throughout this simulation as it is designed to be the base for a relatively comprehensive unit of study. No previous study of the history of black people in America is necessary. The teacher should have some background in American history, including black history, and it would be helpful for him or her to have some background in U.S. civil rights legislation and contemporary urban problems.

Rationale and General Objectives

Sunshine is one of a number of instructional simulation games which have been developed by Messrs. Yount and Dekock of the Interact Company. All of these games are based on the developers' belief in the effectiveness of applying game theory to classroom instructional methodologies. It is apparent by the design of *Sunshine* that the developers believe that gaming and simulation components can be successfully integrated into more traditional teaching units to create a new synthesis that encourages meaningful student learning and participation. The purposes of *Sunshine* are explained by the developers in the Coordinator's Manual: "Because of their birth as Negro or white at the beginning of the simulation, and because of what happens to them in their simulated community, students become concerned about the racial issues boiling around them in the classroom. Suddenly sensing somewhat how Negroes and whites feel, they find they must commit themselves to act. The students learn facts and concepts concerning the history of the American Negro, but the simulation fails if that is all they do. For the simulation succeeds only if the students feel compelled to use these facts and concepts to articulate their attitudes upon the crucial domestic issue of our time."

Content

Sunshine is a simulation game that places students in the roles of citizens of a community called Sunshine. The community has a population of about 50,000 and is divided into six distinct neighborhoods, ranging from the low-income, primarily minority neighborhood, Dead End, to the white and prosperous Heavenly Hills and Mount Olympus. Throughout the course of the simulation, students not only cope with improving their own personal life styles and circumstances and the living conditions of their community, but also study the history of the Negro in America. Their study of black Americans and the U.S. Civil Rights Movement complements the sequence of events in the simulation. Citizens are either black or white in the role playing; however, the community does have other minority group representation. All the citizens work to improve their self-images (and gain or lose points for their efforts). Circumstances beyond the control of the citizens affect them during the simulation, causing them either to gain or lose self-image points. For example, a white citizens' group who lives in Mount Olympus organizes to prevent any redrawing of school district boundaries. All citizens of Mount Olympus lose ten self-image points and all citizens of Sunshine lose five self-image points because *Life* magazine picked up the story, complete with photographs. All of the unforeseen circumstances, both positive and negative, fall into the categories civil rights (as in the case of the example above), social relations, housing, jobs, crime, education, and miscellaneous. Content emphases in this game thus center on having students acquire an awareness of civil rights problems in America, an appreciation of the need for citizen involvement in resolving civil rights issues, and an understanding of the historical basis for the contemporary civil rights problems facing America today.

Procedures

The Coordinator's Manual gives a concise overview of the game procedures: "Students are first 'born' as citizens in Sunshine when they pull identity tags from a hat in front of classmates. These tags show race, education, job, income, and address. Now having their identities, the students pin on their tags and move into one of the six classroom neighborhoods. There they begin studying the identities of their simulated 'births.' As they study, their self-images increase in proportion to the IMPS they earn. However, pressure cards introduced to the game by the instructor move the community into racial crisis, for the pressure factors arbitrarily take away citizens' IMPS—particularly Negroes' IMPS. Eventually, these pressures cause factions to arise in Sunshine, and the factions present proposals for their seven city council members to vote upon (one council member elected from each neighborhood and a mayor elected at large). The simulation ends with the administering of various tests: knowledge of key generalizations about the history of the American Negro; an attitudes test about racial relations in America; and an essay test evaluating the simulation experience itself. Finally, the test results are tabulated by all who have participated in the simulation."

Evaluative Comments and Suggestions

Sunshine is a well-organized and thoughtful simulation game, effectively designed to serve as the base for a three to four and a half week instructional activity. If the students and teacher utilize the materials as suggested by the developers of the game, following the instructions included in the Coordinator's Manual, the participants will enjoy a dramatic and fruitful experience in understanding some of the complexities of black/white relations in the United States today. The game is inexpensive and easy to use, even by teachers and students used to a relatively traditional textbook approach to the study of American history.

SYSTEM 1

Developer: Instructional Simulations, Inc. (ISI)
Publisher: Instructional Simulations, Inc. (ISI)
2147 University Avenue
St. Paul, Minnesota 55114
Publication Date: 1969
Availability: From publisher
Grade Level: 3-12 (Adults)
Subject Area: Applicable to any area
Number of Players: Individually or in groups of 2 to 4

Overview

This is a unique instructional game. Instructional Simulations, Inc. has structured a game process which may be used with many different types of materials in almost any subject area and almost any grade level. The instructor is able to develop his own cognitive materials to work into the game. The game objective is to have students become familiar with the process of information classification.

Materials and Cost

Materials Package:

- Cardboard box, 11¼" x 14" x 2¼", contains the following:
- Coordinator's Manual: 18 pp., 6" x 9", stapled paper cover
- Additional materials: Four 2-sided vinyl-coated scored Information Display Surfaces; 6 sheets of adhesive-backed paper for making data units; 160 plastic tiles for data display; 4 data storage units for data cataloging; and 1 metal and plastic timing unit
- No Student Manual is provided.

The teacher may be required to provide verification sheets or other reference materials, performance record sheets, and additional adhesive-backed paper.

Game is compact, durable, and easy to store. Although game pieces are easily lost, they can be replaced with little effort.

Total Package	$11.85

Required or Suggested Time

The game can be played in any amount of time which is determined appropriate by the teacher. If individualization of instruction is deemed desirable, students may work within the game rules at their own rates. The game may be used repetitively if drill in classification exercises is desired.

Intended User Characteristics

System 1 is appropriate to a variety of users. The gaming procedure is simple enough that the game can be used with middle elementary school students and also with adults. The crucial element in this game is teacher preparation. The teacher defines the content to be used, sets up the specific rules of the game, and plans the sequence of the learning tasks. The game can be used by students individually or in groups. The game can be played in most classrooms; however, students need to have desk-top space on which to work.

Rationale and General Objectives

It is the position of Instructional Simulations, Inc. that students prefer to learn through interaction. When given tasks or problems to solve, students, if given a choice, can learn effectively in a game situation. Although the specific objectives to be attained when using *System 1* are selected by the teacher, in general the game provides a means whereby students can become familiar with the methodology of information classification. Students become actively involved in working with subject matter rules and principles and are given an opportunity to translate learned materials into action.

Content

Subject matter content used in *System 1* is selected by the teacher. The gaming process is built around classification matrices. In the social sciences, for example, students could classify artifacts (anthropology), land forms (geography), family roles (sociology), legislation (civics or political science), personality characteristics (psychology), goods and services (economics), and events (history). The game is not confined to the social sciences; for example, it can also be used in the physical sciences and humanities.

Procedures

Detailed procedures for implementing *System 1* are flexible. The teacher should carefully convey to his students the rules he devises to be used in a particular game, including specification of correct or acceptable responses. In general the following procedure, found in the Coordinator's Manual, is recommended:

1) define the learning objective for individuals, for game sets, or teams;
2) introduce any new subject matter data unit (by way of an explanation);
3) outline general game rules and their correspondence to subject matter rules;
4) outline briefly what rewards, scoring, and records will be used;
5) indicate how peers will serve in information exchange and verification procedures and how information will be verified;
6) indicate length of time for *System 1* use, including length of time for each turn;
7) indicate whether any portion of the day's work will be used for achievement testing or not;
8) begin sample test run, unless *System 1* has been previously used; and
9) then select a starting participant in each game set using a random or past achievement factor.

Evaluative Comments and Suggestions

This is a unique game design which allows the teacher to furnish his own content and rules. This design could cause a good bit of confusion until a teacher becomes familiar with the gaming procedure. The game idea is very simple, but can tend to be confusing when reading the Coordinator's Manual. It is probably best to try the game out with a very simple classification system (e.g., vegetables, fruits, meat) before proceeding to other subject matter areas. When used in classes at Concordia Teachers College in Seward, Nebraska, the student response was very positive. Students seemed to be highly motivated toward use of classification systems as a result of their experience with the game.

TRACTS

Developer:	**Instructional Simulations, Inc. (ISI)**
Publisher:	**Instructional Simulations, Inc. (ISI) 2147 University Avenue St. Paul, Minnesota 55114**
Publication Date:	**1969**
Availability:	**From publisher**
Grade Level:	**7-12 (Adults)**
Subject Area:	**Interdisciplinary Geography, Political Science, Sociology, and Urban Studies**
Number of Players:	**8-48**

Overview

TRACTS is a strongly realistic simulation which illustrates the problems of land use in the city. It is designed to allow students to participate in a decision-making process in order to understand the operations of various interest groups which are involved in city planning. In addition to communication skills, students will learn the importance of negotiation and compromise in making decisions. Although *TRACTS* was designed for use in the high school classroom, it can be used as a training or orientation exercise for city planners and service groups interested in city planning.

Materials and Cost

Materials Package:

- Vinyl looseleaf notebook, 10½" x 11", contains the following:
- Coordinator's Manual: 18 pp., 9¼" x 10½", looseleaf, durable cardboard; includes rationale and objectives, playing procedures, record forms and an explanation of their use, and policy guidelines for each of the four simulated community sectors
- Student Materials: four Sector Manuals, one for each simulated community sector; each is 16 pp., 9¼" x 10½", looseleaf, durable cardboard; each includes rationale and objectives, playing procedures, record forms and an explanation of their use, and policy guidelines
- Additional Materials: one pad of Tracts Record Sheets; 1 pad of News Release Forms; 1 Property Purchase Agreement Form; 2 envelopes containing 8 each (1 per round) land value keys for the Industrial Sector and the Urban Housing Development; 2 cards with land value keys for the Planning Commission and Private Land Development Sectors

Total Package	$42.50

Required or Suggested Time

The materials are designed to be used in 50-minute time periods for a total of four to five class periods. Students can successfully play this simulation many times; they will learn to employ new strategies each time they participate in the simulation process.

Intended User Characteristics

Participants must be able to read at a 9th-grade level and do simple mathematical calculations. No previous knowledge of land use and value is necessary. Although it is intended that students will acquire communication skills in using this simulation, advance mastery of such skills would be beneficial to participants. The instructor will need to spend time in preparation before introducing the game to students. *TRACTS* requires a large classroom which provides privacy for four discussion groups. These discussion groups may also work in separate rooms.

Rationale and General Objectives

Instructional Simulations, Inc. has developed *TRACTS* as a simulation which illustrates the problems of planning for land use in the core city. The simulation has been designed to indicate how many factors interact to determine the value of land; e.g., supply and demand, efforts of interest groups, and occupation density. As stated by the developers, the learning objectives of *TRACTS* enable students to "develop and pursue a land-use and land-holding strategy consistent with a policy; devise, test, and apply a resource-use strategy consistent with a group objective; plan methods for exerting pressure and influence against other groups to achieve a goal; find areas for negotiation and compromise within a policy statement that assures shared benefits; form coalitions and alliances based on shared interests; and exercise democratic principles through a city council in forming consensus and agreement."

Content

Four community sectors, representing private land developers, urban housing development, a planning commission, and industry interact to plan the use of 16 city blocks. Each group has a particular concern which ranges from social, cultural, and aesthetic to economic. The four sectors have capital, land, press units, and policy guidelines in different combinations within each sector. Given these resources, groups devise strategies to achieve their goals. Participants will encounter concepts such as pressure groups, influence, and policy and will explore relationships between buying and selling procedures and between land as a fixed-use commodity and a changing-use commodity. The participants will gain skills in communication, bargaining, decision making, and compromise.

Procedures

The instructor organizes four groups of approximately equal number. The groups are separated and establish headquarters in different areas of the room. Participant manuals for the various sectors are distributed, basic instructions are given, and the general purpose and operational procedures are reviewed.

Each sector selects a spokesman, a city council member, and a recorder; each group proceeds to devise and initiate opening strategies, e.g., selling property, purchasing property, and planning publicity. Following this initial session, the simulation is divided into two 15-minute periods which represent four months; at the end of the 30 minutes, a city council meeting is held which lasts no more than 20 minutes. The game is designed to end after eight 15-minute periods and four city council meetings have been completed.

Each sector has a land value key which is different for the four sectors and which changes at the end of each 15-minute period. Participants base their decisions on the different land values which exist within each 15-minute period.

Rules are flexible and students may be creative and original in their selection of strategies. *TRACTS* is developed with a tightly structured model and chance plays little part in the outcome of the simulation. There is little competition among students for points; rather, the nature of the simulation—involving control of land use—provides the incentive for competition.

Evaluative Comments and Suggestions

The complexity of *TRACTS* requires that the instructor thoroughly familiarize himself with the simulation before playing. Advance reading by the student of the purpose, operation, and starting procedures which are found in the Participant's Manual will leave more class time for use of the simulation.

TRADE-OFF AT YALTA

Developer: Daniel Caleb Smith
Woodlands High School
Greenburgh, New York

Publisher: Scott Graphics, Inc.
Educational Division
104 Lower Westfield Road
Holyoke, Massachusetts 01040

Publication Date: 1972

Availability: From publisher

Grade Level: 7-12

Subject Area: American History, International Relations, and World History

Number of Players: 12-30

Overview

In *Trade-Off at Yalta*, the controversial 1945 conference of the Second World War's "Big Three"—Roosevelt, Churchill, and Stalin—is recreated. Assuming the roles of conference participants and advisers, students are confronted with five major problems which faced the Allies as World War II in Europe was drawing to a close. Dealing with one problem each round, the task of the conferees is to arrive at a settlement which all can endorse. As in reality, this can only be accomplished through hard bargaining or "trade-off." When all five rounds have been completed, players are informed of the actual agreements made at Yalta with respect to those problems, and comparisons are made between the simulation and reality.

Materials and Cost

Materials Package:

Cardboard box, 12½" x 12½" x 2½", contains the following:

Coordinator's Manual: 40 pp., 8" x 10", stapled paper cover; includes rationale, behavioral objectives, historical background, list of materials, instructions for playing and debriefing, bibliography, transcript of record, and copies of players' role identity cards.

Student Manual: *Adviser's Briefcase*. 24 pp., 6" x 12"; includes historical background, instructions for playing, problem briefings, and "documents" relating to the problems; 20 per package

Additional Materials: 30 profile cards, 30 folders (Summary of Yalta Agreement), 10 copies of a reparations statement (in Russian), and 1 envelope containing top secret message

Total Package $28.00

Required or Suggested Time

Playing time is flexible, depending on how many rounds are played and what time constraints the teacher imposes on each round of play. A full playing of the game could easily involve four or five class periods of 45 to 50 minutes each; but the game can be shortened to two or three periods. At least one period should be reserved for debriefing.

Intended User Characteristics

The student manual, *Adviser's Briefcase*, is well organized, and all materials are clearly and simply worded. This, combined with the relatively simple structure of the game, makes it within the reach of average junior high school students without being too easy for upper level senior high school students. No mathematical skills are involved. Thirty roles are identified, but the game has been played successfully with as few as 12 by eliminating a proportionate number of advisers from each team. All necessary materials for playing are included in the game, and the teacher needs only to make available a playing area large enough to provide privacy for each of the three groups into which the class is divided.

Rationale and General Objectives

The game is designed to give students experience in the process of negotiation and to demonstrate how compromise is reached. Students learn that if they are to reach agreement, yet protect their own interests, they must trade-off things they want in order to get things that they want more. This involves setting priorities, attempting to estimate the other parties' priorities, and planning diplomatic strategy. From a cognitive standpoint, players should come away with an appreciation of the complexity of the problems left in the wake of World War II. The game also has some important affective dimensions. By playing the roles of negotiators and advisers in a complex international situation, the players should learn some basic skills of negotiation and compromise which they can apply to problem situations which confront them in personal situations.

Content

Trade-Off at Yalta simulates the secret war-time conference of February, 1945, in which Franklin D. Roosevelt, Winston Churchill, and Josef Stalin made agreements which were to affect the destiny of mankind for generations to come. Most of the roles and all of the problems to be settled are authentic; and all of the information provided about them is at least realistic, if not real. Besides the "Big Three," other roles include various advisers from military, foreign affairs, and economic agencies of the three governments. The negotiating is done only by the "Big Three" with the advisers playing a supportive role. The players approach problems one at a time, and seek a compromise agreement which all parties can endorse. The five major problems are 1) Polish Borders, 2) Keeping the Postwar Peace, 3) the Far Eastern Situation, 4) The Masters of Germany, and 5) Reparations. A briefing on each problem is provided. Each problem statement is also accompanied by a set of realistic memos, cables, news items, etc., designed to give the players a better understanding of the situation and an indication of the mood of others. When all five problems have been resolved, the simulation ends and debriefing begins. In the debriefing session, the actual agreements made at Yalta are revealed. Players can measure their own success at trade-off with the results of the original conference. They can go on to speculate about why Roosevelt, Churchill, and Stalin made the agreements they did, and how those agreements helped to set the pattern of events in the post-war era.

Procedures

Before the game begins the class should be prepared by an overview of World War II up to the time of the conference and should be aware of the Allied strategy for the final defeat of Germany. They should also have a general knowledge of the character and personality of Roosevelt, Churchill, and Stalin. However, they should have little or no knowledge of the Yalta Conference and the agreements there. The teacher distributes to each player a profile card and an *Adviser's Briefcase* (all identical) which the class reads together. The teacher announces the first problem, Polish Borders, and presents the appropriate introductory material. The players divide into respective teams—American, English, and Russian—to read the appropriate sections of their *Adviser's Briefcases* and plan their strategy. When these sessions have been completed, the teams assemble for the conference and negotiate until they can set forth their unanimous position. The same procedures are repeated for each round of play. The number and time of rounds are left to the teacher's discretion. When all rounds have been completed, the class assembles for debriefing. Each player receives a copy of the "Summary of Yalta Agreement."

Evaluative Comments and Suggestions

Trade-Off at Yalta is very well adapted to classes in United States history, world history, or international relations, particularly if they are dealing with the period of World War II and the post-war era. The materials are historically authentic and well organized. If the players identify well with their roles and the gravity of the problems, the teacher's main difficulty will probably be inadequate time, trying to simulate in a few hours a process that involved many weeks. However, within these time constraints, *Trade-Off at Yalta* can be an effective instrument for introducing students to the process of diplomacy.

TRANSACT

Developers: James E. Davis and Suzanne Wiggins Helburn
Publisher: Addison-Wesley Publishing Company, Inc.
2725 Sand Hill Road
Menlo Park, California 94025
Publication Date: 1973
Availability: From publisher
Grade Level: 9-14
Subject Area: Economics
Number of Players: 20-48

Overview

Transact is taken from *Economics in Society*, a six-volume social studies program for use in grades 9 through 14. The game can be used in economics courses or in any social studies course in which the teacher wants students to experience market activity. *Transact* is an active simulation designed to stimulate student activity and interest. A minimum of 20 players is required, but as many as 48 players can participate. The game coordinator needs basic theoretical and practical knowledge of the operation of the market.

Materials and Cost

Materials Package:
Manila envelope, 9" x 12", contains the following:
Coordinator's Manual: 4 pp., 8½" x 11", paper pamphlet; includes instructions for organizing the game, hints on ways of conducting it, suggestions for debriefing, and models for constructing the market record sheet and individual score sheet
Additional Materials: 28 seller cards and 28 buyer cards, each 5⅞" x 4"
Total Package $6.00

Required or Suggested Time

The developers recommend one hour for conducting *Transact*, and suggest that the time be used as follows: ten minutes to explain the directions and begin play; 20 to 30 minutes for actual trading sessions; 15 to 20 minutes to debrief the activity. In general, the larger the group the more time it will take to manage the game.

Intended User Characteristics

Transact can be used in grades 9 through 14 to study the concept of market. There is no reading required. Each player keeps his own score and must be able to do simple addition and subtraction. The game coordinator should be able to assist the students in analyzing the transaction period and in understanding the concepts of market competition and market equilibrium. The noise level can become very high during the transaction period, so a room should be chosen where this will not disturb others. Poster paper, a chalkboard, or an overhead transparency is required for making a market record sheet which the entire class can see.

Rationale and General Objectives

Transact was designed as a market simulation because the developers believe that students making transactions on a competitive basis will experience and understand the incentives of real buyers and sellers as they seek to avoid loss and make a profit. Davis and Helburn state that "This experience should increase student awareness of the real world situation which the game is patterned after and create a high level of classroom interaction." The developers expect that students should: "1) become keenly aware of the nature of market competition by playing buyer and seller roles in a market situation. In particular, players will become aware of the information value of the going market price in helping buyers and sellers make decisions; 2) know that competitive market interaction results in a tendency for prices to move toward equilibrium; 3) identify some factors which affect profits and losses in buying and selling."

Content

Transact simulates a wholesale market with cords of wood representing the product being sold. Buyers attempt to purchase cords of wood at the lowest cost possible, while sellers try to get the highest price they can. As each attempts to minimize cost or maximize profit, the market tends to stabilize or move toward equilibrium where the prices sellers are asking and buyers are offering are the same. Thus, students actually experience the economic concepts of market, competition, buyer, seller, profit, loss, and equilibrium.

Procedures

The class is divided into two groups, approximately equal in size: one group role-plays buyers and the other group, sellers. Roles cannot be switched during the course of the game. Students are given individual score sheets on which to record their transactions, and a market scorekeeper is appointed to record all reported transactions. The game coordinator may assume the latter role if he wishes all students to participate in the market. Each student receives either a buyer or seller card according to the group he is in. A typical card for sellers might be: "You are selling one cord of wood. Try to get the highest price possible. However, you should not take less than $100.00 unless you decide to take a loss." A buyer card might say: "You are buying one cord of wood. Try to pay the lowest price possible. However, you should not pay more than $90.00 unless you decide to take a loss." The prices on the buyer and seller cards vary, with the majority ranging from $40.00 to $70.00. Students can negotiate only in five or ten dollar multiples, i.e. $100.00, $95.00, $90.00, etc. At a given signal students meet in the center of the room and try to find someone with whom to negotiate, following the directions on their cards. After a transaction is agreed upon, the seller reports it to the market scorekeeper. Buyer and seller both record the transaction on their individual score sheets, return their cards, get new ones, and begin bargaining for another transaction. The market scorekeeper records the first 15 transactions as a group, then the second 15, and so on. This process continues until the game coordinator calls a halt. Participants can make one more transaction, and then calculate their total transactions and net gains or losses. Debriefing should follow immediately and should focus on: 1) individual reports of net gains and losses; 2) students' reactions to the experience; 3) the clustering of prices around the middle—$55-$60; and 4) the relationship between the simulation and a real world market.

Evaluative Comments and Suggestions

Transact is a simplified version of market competition. As such, it is useful in teaching students the roles of both buyer and seller in the market. The game coordinator should be able to adequately explain questions about real world markets which are not dealt with in the simulation. It might also be advantageous to substitute a commodity more familiar to the students' daily lives. Although this would not change the character of the game, it might add somewhat to the level of interest.

TRIANGLE TRADE

Developers:	**Russ Durham and Jack Crawford**
Publisher:	**Simulation Systems Program** **United States International University** **Instructional Development Division** **P.O. Box 1028** **Corvallis, Oregon 97330**
Publication Date:	**1969**
Availability:	**From publisher**
Grade Level:	**7-12**
Subject Area:	**American History**
Number of Players:	**15-44**

Overview

This game is a simulation designed to acquaint participants with the economic structure of the New England colonies and the mercantile philosophy of Great Britain during the 17th century. It is designed for use with both junior and senior high school students, primarily in American history classes. *Triangle Trade* stresses cognitive achievement more than many instructional games presently on the market. The developers include a list of behavioral objectives together with suggested test items. This is an inexpensive game, since the teacher gathers and produces the materials needed according to directions provided in the Coordinator's Manual.

Materials and Cost

Materials Package:

Coordinator's Manual: 25 pp., 9" x 11½", includes the following: copies of all materials necessary to conduct the game; money, role sheets, overhead transparencies, trading cards, sales records, loan contracts, port receipts, clearance papers, player information sheets, introduction and background information, list of behavioral objectives and test items, pre-game briefing section that explains the mercantile system and includes 12 transparency masters, diagram for classroom arrangement, section describing how to introduce the game to students, suggestions for post-game evaluation and follow-up activities, guide to assembling the game resources, and bibliography of reference books and audio-visual aids

Total Package (Manual only)	$15.00

Required or Suggested Time

Three to four hours will be required for use of this game, including pre-game briefing and post-game debriefing.

Intended User Characteristics

The game requires only a small amount of reading for study of role sheets, but it is essential that players read and understand their role sheets thoroughly. Students who play the banker, the distiller, and the port authority must be able to handle a great many simple arithmetic computations. The teacher must be willing to spend the necessary time to prepare the materials to be used in the game and a large room should be available for use. It would be helpful if he or she not only has an understanding of American history, but also some background in economics.

Rationale and General Objectives

The purpose of this game is to provide students with an understanding of the economic structure of the New England colonies and the mercantile philosophy of Great Britain during the 17th century. If students have to assume responsibility for what they learn and are actively involved in the learning process, the developers believe that they will be more interested in what they are learning and will learn more quickly. Furthermore, the developers believe that learning through a simulation process increases the opportunities for students to gain experience in analytical thought and practice in making decisions.

The developers have listed the following cognitive objectives for students to achieve. The learners will:

1) list the following information about

the particular triangle trade route covered in the exercises: the products traded in triangle trade, the sources of the products traded, and the locations of where the products were traded;

2) identify the game functions of at least 75% of the various players participating in the game;

3) list three reasons why the New England colonies did not fit into the British mercantile system;

4) identify at least two environmental factors which helped establish shipping interests as the main commerce activity in the New England colonies;

5) state two reasons why the British government opposed the triangular trade route;

6) explain with two reasons why the New England colonies established their triangle trade system;

7) describe the influence of the British mercantile system on the economic development of the New England colonies;

8) describe how the British revenue collected from the shipment of French molasses from the West Indies to New England was affected by the acceptance of bribes by the British Customs Service;

9) explain how the establishment of the New England colonies by Great Britain was intended to further the interests of the British mercantile system; and

10) describe how and why the Prime Minister attempted to enforce the collection of duties levied on French molasses carried by New England shipmasters.

Content

If the students become successfully involved in this game, they are sure to gain some cognitive understandings about the triangular trade process. Some players become shipmasters and move from one harbor to the next, trading rum for slaves and gold in Africa, trading slaves for sugar and molasses in the West Indies, and carrying the sugar and molasses back to New England where it will be made into more rum. During this process, the shipmasters nave to deal with planters, port authorities, bankers, and the British Navy. The participants are able to see why colonists of New England wanted to trade with countries other than England and why England found the New England colonies expensive to administer. The participants also gain some understanding of how it felt to be living in colonial America in various commerce-related roles. As the participants "wheel and deal" with one another, they practice skills of effective communication and enjoy the art of persuasion.

Procedures

The participants are seated around a large table in the center of a room, as indicated in a diagram in the Coordinator's Manual. The table serves as a game board with three corners of it representing ports in New England, Africa, and the West Indies. Shipmaster A places his ship in the New England port. B puts his in the African port, and C places his in the West Indies, and the game is ready to begin. First, however, the game coordinator should review the shipmasters' roles with the entire class, for this is the role that stimulates most of the interaction. The game coordinator should also check to be sure every player understands the special rules that apply to his particular role. The game begins by each shipmaster moving his boat to the next port and trying to complete his business transactions within a ten-minute period of time. This ten-minute period simulates one month of actual time and represents the amount of time it takes to cross the ocean and complete business transactions with the rum distiller, the slave trader, or the West Indies planter. Each shipmaster tries to sell his cargo and purchase new cargo to take to the next port. At the same time, he must deal with the demands of government officials as well as pressure groups like the abolitionists and lobbyists for the British West Indies planters. At the end of each month (ten minutes), he either moves his boat to the next port or stays in the same port for another month. The game is considered completed when 12 months have been played.

Evaluative Comments and Suggestions

The environmental model used in this game is based on a very select representation of reality. However, it contains those elements of reality necessary to achieve the designers' purpose. The game itself can be very effective in helping students to acquire a great deal of information about a particular period in American history, gaining communication and game analysis skills in the process. The Coordinator's Manual is unusually comprehensive. The game design and description of roles allow some degree of flexibility for the participants but limit the game outcomes to various predictable channels. Students definitely should have some understanding of the mercantile system before playing this game. Again, it is helpful if the teacher has some background in both American history and economics.

THE UNION DIVIDES

Developer: Olcott Forward Publishers, Inc.
Publisher: Olcott Forward Publishers, Inc.
234 North Central Avenue
Hartsdale, New York 10530
Publication Date: 1971
Availability: From publisher
Grade Level: 7-12
Subject Area: American History and Political Science
Number of Players: 20-30

Overview

The Union Divides is a simulation game designed for junior and senior high school students to explore the conflicts the United States faced during the years from 1850 to 1861. The game can be used as a one- to two-week unit of study. Such issues as expansion versus containment of slavery in the territories, federalism versus states rights, agriculture versus industry, and property rights versus human rights are considered by students, playing roles of state governors, as factors which brought about sectional tension and civil war. An implicit problem, acted out in the process of simulation, is the question, "What contribution did the extremists (both northern and southern) make to sectionalism and to final outbreak of the Civil War."

Materials and Cost

Materials Package:

- Cardboard box, 13½" x 12¼" x 1½", contains the following:
- Coordinator's Manual: 39 pp., 6¼" x 9", stapled paper cover; includes rationale, directions for playing, transcript of the record, historical background information to the game, suggested follow-up activities, and bibliography
- Student Manual: 16 pp., 6" x 9", stapled paper cover; includes rules for the game, historical background to the game, descriptions of the issues presented in each of the 7 rounds
- Additional Materials: 1 long-playing 33⅓ rpm record; 30 governor profile cards; 8 copies of the newspaper, "The Capitol Gazette"; 3 telegrams; 1 log of the ship Baltic; 2 wall charts; and 1 copy of Kenneth M. Stampp's *The Causes of the Civil War* (186 pp., Prentice-Hall, Inc., 1965. $1.95)

Total Package $28.50

Required or Suggested Time

Each of the seven rounds can be played in a 50-minute class period. Minimum briefing and follow-up discussion will require an additional two classroom sessions.

Intended User Characteristics

The developers suggest that the game "may be introduced in a history course after the class studies expansion westward and sectional attitudes toward slavery." The game can be played in a traditional classroom that is large enough to allow student movement and enable them to speak together in large or small groups. The game requires no student mathematical computation. The student materials provide adequate background for sound, informed discussions. The teacher should act as a resource and advisor. The developers also suggest that the teacher may desire to balance the composition of the participant groups to assure that all issues and viewpoints are represented effectively and to facilitate group interaction.

Rationale and General Objectives

The Union Divides was designed to illustrate social, political, philosophical, and economic differences between the North and South that contributed to the outbreak of the American Civil War. Among the objectives listed in the Coordinator's Manual are the following: 1) students become aware, crisis by crisis, of how a nation's unity and stability can be disrupted to the point of civil war; 2) students discover to what degree past events compare to present events, e.g., how does Lincoln's role in preparing the U.S. for war compare to those of Johnson and Nixon; 3) students consider whether past events were inevitable or whether they were subject, at least in some degree, to human will; and 4) students gain practice in understanding and interpreting simple source materials.

Content

Assuming the roles of 30 state governors meeting in Philadelphia periodically during the years 1850 to 1861, players confront seven sectional issues which must be debated and resolved by majority vote. The successive rounds follow the chronological development of increasing regional tensions, as governors decide whether or not the unity of states can be preserved. In Round One, entitled "The Admission of California," students discuss whether or not slavery should be allowed in a new state. In Round Two, "Kansas-Nebraska Act," students consider whether people in territories can decide for themselves to allow or abolish slavery. Round Three, "Dred Scott Decision," stimulates participants to ask what the historical consequences for the U.S. will be if blacks are continually deprived of full citizenship and human rights. In Round Four, "John Brown's Raid," students reflect on the federal government's responsibility for recognizing slavery and protecting slaveholders in states and territories where slavery exists. Round Five, "Black Abolitionist Movement," asks students to consider whether states should outlaw incendiary writings advocating slave rebellion and civil violence. Round Six, "South Carolina Secedes," asks students to discuss whether any state can legally and justifiably secede from the Union. In Round Seven, "The Union Loses Fort Sumter," students consider whether the events in Charleston Harbor leave room for peaceful resolution. Follow-up activities encourage the students to compare the simulation outcomes with the actual historical occurrences, and to make applications to contemporary events.

Procedures

Players assume the roles of 30 governors representing four equally proportioned interest groups—northern moderates, southern moderates, northern abolitionists, and southern extremists. Each student receives a profile card describing his state's economic and political background and his philosophic stance on current sectional issues as governor of the state. Each participant also receives a handbook describing the sequence of play and historical information relevant for making round decisions. The format for each round is similar. Each round begins with a recording, newspaper account, or telegram dispatch which presents a dramatic account of the issue introduced. Each group must review and discuss information, present position statements, and vote. Abstentions are not allowed and players are encouraged to shift alliances, trading support to benefit their own state's position. Each issue is voted upon and carried by majority rule. Individual points are scored, depending on whether a governor's position allies with the majority rule. The winner is the interest group with the highest number of points gained after the seven rounds.

Evaluative Comments and Suggestions

This is not a highly complex game, yet the materials realistically reflect the historical issues presented. The game is based on thoughtful research and adaptation of primary and secondary source material. Because the time required for playing the complete game is long and the round format and roles remain constant, the game might be modified by having students work with supplementary materials between rounds. Some additional resources are suggested in the Coordinator's Manual. Although the rationale, objectives, support materials, and procedures for implementing the game are explicit, more specific suggestions for debriefing and follow-up would be helpful to many teachers.

VALUES IN ACTION

Developers: Fannie Shaftel and George Shaftel
Publisher: Holt, Rinehart and Winston, Inc.
383 Madison Avenue
New York, New York 10017
Publication Date: 1970
Availability: From publisher
Grade Level: 4-6
Subject Area: Human Relations, Social Problems, and Values Clarification
Number of Players: 3-36

Overview

Values in Action is a media kit designed for use with elementary school students. The kit includes ten individual color filmstrips with accompanying records and a comprehensive Coordinator's Manual. The filmstrips are used to present values dilemmas to young people—dilemmas that are relevant and interesting to a wide range of students. Through role-play and discussion techniques, students are to understand more fully the complexities of problems which face them and other people, and to translate their learning experiences into means for more effective coping with values conflicts and problems that face them in their daily lives.

Materials and Cost

Materials Package:
- Cardboard box, 13" x 17", contains the following:
- Coordinator's Manual: *Values in Action*. By Fannie and George Shaftel. 84 pp., 7¼" x 9", stapled paper cover; includes rationale for values education through role-playing, theory and methodology for role-playing and for discussion techniques, instructions for use of accompanying media, and lesson-by-lesson suggestions for the teacher, with record transcript
- Additional Materials: 10 color filmstrips; 3 accompanying 33⅓ rpm records

Total Package $103.95

Required or Suggested Time

The developers make no suggestions for the length of time necessary for each of the nine lessons; role-playing depends to a great extent upon the spontaneous responses of the children to each situation, thus enactment time can vary greatly. Each of the lessons, however, requires a minimum of one hour of classroom time for effective use.

Intended User Characteristics

These materials appeal to and are effective with a wide range of elementary age students because of their values emphasis, which is relevant to most young people, and because the filmstrips portray young people of diverse economic and ethnic backgrounds. Teachers need no prior training for use of these materials; the Coordinator's Manual is thorough in explaining role-playing and problem discussion procedures and a demonstration lesson is included on one of the filmstrips. The teacher should, however, be willing to accept students' spontaneous and sometimes "unacceptable" responses as they cope with both role-play and the experience of analyzing their own and other people's values.

Rationale and General Objectives

The following rationale and objectives are offered by the Shaftels in the Coordinator's Manual: "Every day, children make decisions in their life encounters that both shape and reflect their values . . . Children need help in confronting the many dilemmas in their lives. It's not always easy to decide how to choose an action. Schools can help children explore the many decisions they make. If this exploration is done in the classroom . . . in public . . . values are (can be) clarified and can grow into socially responsible decisions." The developers see role-playing as a means whereby students can clarify their values and learn to take responsible problem-solving action. They explain role-playing as "a group problem-solving process . . . when, . . . under the skillful guidance of a teacher, children can discover for themselves the consequences of various lines of action." In addition, according to the developers, through use of these materials students will improve their abilities to communicate verbally and nonverbally, experience dialogue and idea-sharing with an understanding adult, learn to analyze problems, and make more effective problem-solving decisions.

Content

Values in Action revolves around nine different problem situations, each of which is presented to the students in the form of a sight and sound filmstrip. The tenth filmstrip is a demonstration lesson of one of the problem situations. Each of the problems can be used as a vehicle for role-play, discussion, or both. All of the problems are relevant, interesting, and of concern to elementary grade school children. One of the situations has to do with the dilemma posed when a group of guys, having stayed after school, starts playing with the lens to a filmstrip propector and accidentally breaks it. Three of these youngsters were staying after school to be punished for an earlier misconduct. One of them was there just to keep his friends company. He, Johnny, disagrees with the devious means his friends are considering in order to avoid "getting caught" for their latest escapade; however, Johnny is also concerned about "squealing" on his friends and possibly losing their friendship. Each of the lessons poses a similar values dilemma. Throughout either role-play of the dilemmas, discussion, or both, students gain communication and analysis skills and develop increasingly sophisticated thought processes. As a result, the basis for forming responsible patterns of social action is developed.

Procedures

Each of the nine lessons begins with the presentation of a filmstrip and recording. After viewing the filmstrip, the teacher and students normally discuss the problem situation they have just seen portrayed. As they discuss what happened, the teacher can guide the students in considering various ways the dilemma might be resolved. The discussion can either develop further, or the teacher can suggest that some of the students enact what they think might happen next and how the problem might be solved. If the situation is role-played, the teacher should lead students to consider the consequences of their action. Examination of consequences, however, should also be an important part of the discussion technique, even without student enactment of the situation. Students and the teacher should consider a variety of possible alternative means —both positive and negative—to resolve the problem. At the conclusion of the activity the students should analyze their experience, hopefully coming to conclusions about possible effective means for problem resolution.

The Coordinator's Manual explains the step-by-step sequence of events necessary for both effective role-playing and group discussion. Suggestions are also made for use of each of the nine instructional activities.

Evaluative Comments and Suggestions

Designed for thoughtful role-playing, discussion, analysis, and evaluation of real-life values dilemmas facing young people, the *Values in Action* materials can be very effective instructional devices. The Coordinator's Manual contains one of the most explicit, comprehensive rationales for and descriptions of the use of role-play for the instruction of young people that is available at the present time.

References

Shaftel, Fannie, and George Shaftel. *Role-Playing for Social Values: Decision-Making in the Social Studies*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967. 431 pp.

WHEELS

Developers: E. Eileen Jordan and James W. Murphy
Publisher: Paul S. Amidon and Associates
5408 Chicago Avenue South
Minneapolis, Minnesota 55417
Publication Date: 1970
Availability: From publisher
Grade Level: 10-12
Subject Area: Economics
Number of Players: 2-35

Overview

Wheels provides students with a simulated experience in successfully purchasing and maintaining a car for one year. Designed for high school students between the ages of 15 and 18, the simulation assists students in discovering the implications of a large purchase over a significant period of time. Sufficient data such as amount of income, availability of financing, reasons for wanting a car, and personal taste are included so a student can make rational decisions about the best kind of car for him to buy. The cost of operation and unexpected events are built into the game to simulate expenses car owners might encounter during a one-year period. Computations are made for each month's expenses, and students must cope with both the planned and the unexpected. The developers were aided in the preparation of *Wheels* by consultants from the Northwestern National Bank and the Minnesota Insurance Information Center. Data for student roles are taken from actual experiences of students in the Minneapolis high schools. Charts on expenses and accidents are based on information provided by the U. S. Department of Transportation, the American Automobile Association, and the Minnesota Department of Highways. Although *Wheels* was originally designed to be played with a computer, a set of rules and procedures for playing the game without a computer is available.

Materials and Cost

Materials Package:

Leatherette briefcase, 10" x 16" x 2", contains the following:

Coordinator's Manual: 23 pp., 8½" x 11", spiralbound paper cover; includes introduction, objectives of the simulation, supplementary information on automobile finances, an example, bibliography, and an appendix listing unexpected events and special instructions for car resale

Student Manual: 18 pp., 8½" x 11", spiralbound paper cover; includes introduction, information on financing and insurance, instructions, list of unexpected events, and various financial charts; 35 per package

Additional Materials: *Rules and Procedures for Playing the Game Without the Use of the Computer.* 12 pp., 8½" x 11", spiralbound paper cover; includes rules and procedures, charts on costs and unexpected events, miles driven and accident potential, 3 sets of roles, 1 pad of activity sheets, page of red and green cards which determine actual monthly expenditures

Total Package $40.00

Required or Suggested Time

Wheels can be completed in four to five 40-minute classroom periods. This amount of time should allow for an introductory overview as well as a post-simulation debriefing session.

Intended User Characteristics

Although cultural conditioning might make the content of *Wheels* more exciting for male students, most high school juniors and seniors seem to have a common interest in the purchase of a car. The charts included in the package eliminate the need for more than basic mathematical skills; however, students need to be able to follow written directions precisely.

Rationale and General Objectives

The developers feel that students are more likely to understand the relationship between spending and income when it is related to a situation which is relevant to their lives. As a result of working through the simulation, a student should be able to:

"1) Exercise his freedom of choice in making a purchase so that he maximizes his personal satisfaction and attains the highest level of living possible; 2) Plan his spending so as to provide for necessities before making purchases of fleeting value; 3) discover that the sum total of his expenditures is limited by his current income or the amount that he can borrow and safely repay from future income."

Content

Wheels is a simulation of the decision-making implications in buying a car and maintaining it for one year. Students determine the type of car which best meets their needs and tastes and learn what financial and insurance arrangements are available to them. A variety of unexpected happenings, such as accidents and car repairs, occur, and students must adjust their decisions as they go through the 12 rounds (one year) of the game.

Procedures

The Coordinator's Manual outlines the following procedures to be followed in the development of the simulation without the use of a computer: Each student selects the car of his choice from the list in the student manual. He then selects his role from the 14 alternatives found in the role packets. He enters information on car, role number, and monthly income on his individual Activity Sheet. By referring to the student manual, each player studies and chooses his own type of financing. Statistics related to this choice are also entered on the Activity Sheet. He then must study and choose his insurance coverage from the appropriate tables and descriptions. *Wheels* lasts for one year of time or 12 monthly periods. For each period, students select a red card and a green card. The red card indicates where to look for the number of miles driven that month. By multiplying the number of miles by the cost per mile for their car, players compute the monthly running expense. The number on the green card indicates where to look to determine if a player was involved in any accidents during the month. If an accident did occur, the chart indicates how to determine the expenses involved. Students then choose another red card and another green card. The second red card explains where to look to see what repairs were needed during the month. Cost of repairs is computed with the use of the card. They must decide whether to make necessary repairs immediately or hold them in abeyance for the future; however, all repairs must be completed by the end of the twelfth month. The number on the green card tells the player where to look to find any unexpected events. Players note all items on their Activity Sheets and compute their total monthly income and total monthly expenses. Players prepare for the next month's activity by checking their role sheets for changes in income or expenses. The same procedures are followed for each month until all players have completed one full year or have decided against owning and operating an automobile. At the end of the simulation, teachers should lead a debriefing session during which students can discuss the decisions they made as well as the realities of car ownership.

Evaluative Comments and Suggestions

Wheels is a simulation which might be more interesting for male participants than female. The objectives of the game are valid, however, and the teacher could easily adapt the content if he felt it might involve a wider variety of participants. The simulation relies somewhat on chance in order to determine expenses. It does not take into account factors such as an individual's maintenance habits or specific automobile strengths or weaknesses for a given year. Because of the dependence on individual decision-making, there is very little opportunity other than in the debriefing session for any form of student interaction.

WORDS AND ACTION

Developers: **Fannie Shaftel and George Shaftel**
Publisher: **Holt, Rinehart and Winston, Inc.**
383 Madison Avenue
New York, New York 10017
Publication Date: **1967**
Availability: **From publisher**
Grade Level: **K, 1 (2)**
Subject Area: **Social Problems, Communication Skills, and Language Development**
Number of Players: **3-36**

Overview

Words and Action is a set of large mounted photographs, complete with a comprehensive Coordinator's Manual, that has been designed to expose children to real-life problems in an involving and interesting way. Once children understand the problems and ideas being illustrated in a photograph, they can pantomime and role-play both the situation and possible alternatives for solving the problems they perceive. In this way they can increase their communication skills and also learn how to cope effectively with problem-solving situations that confront them in and out of school. The materials are appropriate and effective when used with primary students of a wide range of ability levels and ethnic backgrounds.

Materials and Cost

Materials Package:

- Cardboard box, 18" x 24", contains the following:
  - Coordinator's Manual: *Words and Action*. By Fannie and George Shaftel. 84 pp., 7¼" x 9", stapled paper cover; includes explanation of role-play theory, instructions for use of the materials, and detailed procedures for individual role-play lessons
  - Additional Materials: 20 role-play photos, mounted on 10 separate Photo-Problem cards; each card 17½" x 23½", heavy cardboard
- Total Package $28.50

Required or Suggested Time

No suggestions for length of time for using these materials are provided in the Coordinator's Manual. Usage depends primarily on the interests of both the teacher and children. Each photograph could easily be the basis for more than one 10- to 30-minute session.

Intended User Characteristics

These materials have been designed for use by a wide range of students with diverse abilities and ethnic backgrounds. The developers specifically remark that the materials are aimed at students from urban settings who may, because of busy parents and lack of opportunities, not have had much experience in expressing themselves verbally either with other youngsters or with understanding adults. Neither have these and many other children had the opportunity to express their feelings by taking imaginative action, in an instructional setting, to attempt to solve problems. Although teachers do not need prior training in role-playing since the Coordinator's Manual is quite detailed, they should be willing to participate openly and acceptingly with their students throughout the role-play activities.

Rationale and General Objectives

In the first pages of the Coordinator's Manual, Fannie and George Shaftel state that "The purpose of the *Words and Action* program . . . is to help the teacher evoke both verbal and action responses from children unaccustomed to expressing themselves in social situations" because "children from low-income families where parents have little time to spend with them often are starved for chances to talk. Their ability to speak is often less developed than it should be." Thus, the objectives for this program are aimed at providing experiences for children that will: "1) develop spontaneity; 2) give children rich and varied stimulation to talk, to describe their experiences, and to express their feelings in gestures and language; 3) provide children opportunities for dialogue wtih a sympathetic adult; 4) present intriguing problems that will encourage inquiry at an appropriately simple level, provide chances for defining and exploring alternative ways of solving a difficulty and the probable consequences of these solutions; and 5) give children practice, at a beginning level, in decision making." The Shaftels' work has made a significant contribution to the refinement of role-playing as an instructional device, making it possible to accomplish the objectives listed above. The Coordinator's Manual includes a rationale for and explanation of the use of role-play; another excellent resource is the book by the Shaftels, *Role-Playing For Social Values: Decision-Making in the Social Studies.*

Content

The content derives from each of the 20 Photo-Problems that are the basis for the children's pantomime and role-play activities. Each of the photographs presents a problem that is relevant and interesting to most youngsters, particularly children who are growing up in or have lived in urban settings. The first four photographs are designed to present problems which the children can easily role-play, thus easing them into a situation where they can role-play and also learn from their experience. For example, the first photo shows a little girl who has dropped some groceries. The lesson focuses on how such a problem can be handled. Other photographs look at such problems as how to cope with parental displeasure, how to rescue a kitten in plight, how to manage conflicts between brothers and sisters, and how to get over being frightened by an experience like going to the doctor's office.

Procedures

The Coordinator's Manual is explicit in providing step-by-step, lesson-by-lesson suggestions for use of these materials. Sample role-play dialogues are included. Although the specific suggestions for use of each Photo-Problem card differ, the basic sequence of activities for use of each card is the same: 1) the teacher asks the children a few questions pertaining to the situation portrayed in the photo, although they have not yet seen the photo; 2) the teacher shows the children the photo and discusses it with them; 3) the teacher invites a few students to pantomime or role-play the situation portrayed on the card, selecting those students who have indicated some understanding of and interest in the problem; 4) the teacher then encourages more discussion, asking all the children what they think will happen next; 5) some students then role-play a possible solution to the problem; 6) the teacher then encourages discussion of the solution and asks if other solutions might be possible; and 7) another possible solution is then role-played and discussed, with emphasis on the consequences of the action taken to resolve the problem. Throughout the sequence of activities, the teacher tries to encourage as many students as possible to participate.

Evaluative Comments and Suggestions

These materials can be extremely effective instructional devices, and are unique in that they are aimed at the very young school child. The Coordinator's Manual is helpful and thorough. Children both enjoy and learn from the role-play and discussion activities. Perhaps one of the most significant aspects of these materials is that students at an early age are gaining experience in enacting possible solutions to real-life problems, are able to examine the consequences of these actions, and thus are better equipped to cope with problems they encounter in their own lives. Verbal expression is heightened while creativity and imaginativeness are encouraged.

References

Shaftel, Fannie, and George Shaftel. *Role-Playing for Social Values: Decision-Making in the Social Studies.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967. 431 pp.

YOUTH CULTURE GAME, THE

Developers: Loel Callahan, et al.
Publisher: Urbandyne
5659 South Woodlawn Avenue
Chicago, Illinois 60637
Publication Date: 1971
Availability: From publisher
Grade Level: 10-12
Subject Area: Sociology
Number of Players: 20-80

Overview

The Youth Culture Game is designed "as an introduction to cross-generational communication, a *first-step* in the search for understanding." The developers are all "in their mid-twenties, white, and from middle class suburban homes." Many of their recent activities have been as street workers and in coffee house programs for high school and college youngsters. They were assisted in the development of this game by youths in their mid-teens from the Chicago area, who evaluated the reality of situations posed in the game. *The Youth Culture Game* simulates the "structures and dynamics" of real life situations faced by young people. Improvisational theater production is used to achieve this goal. The "set" should represent, as fully as possible, the total environment of youth culture. The debriefing session at the conclusion of the game is vital to the achievement of the stated goals.

Materials and Cost

Materials Package:
8½" x 11" spiral bound booklet, includes:
Coordinator's Manual: 33 pp.; includes background material on youth culture, an overview and organization of the game, evaluation procedures, and related bibliography; tear-out pages giving descriptions of roles, prop list, and sample play money

Total Package	$15.00

Required or Suggested Time

These materials were designed for a playing time of 60 to 90 minutes in one span. The debriefing period following the game should last longer than the proposed 30 to 60 minutes. However, it should be noted that the extensive preparation for this simulation will require a planning time of from two to four weeks by the coordinator.

Intended User Characteristics

Since the major technique is improvisation, players and game operators alike must have the ability to role play in a realistic fashion. They must involve themselves totally in a simulated environment. It is suggested that this type of activity would be most successful in the upper levels of high school. The physical layout for this activity is extremely critical to success. Since the complete environment of youth culture should be presented at one time, it is necessary to utilize several small rooms off a corridor or to divide a large area into sections with furniture, bookcases, or some other device. The essential point is that some means for defining the various culture areas must be accomplished. Props are suggested in the manual, but game operators should be flexible in staging the improvisation.

Rationale and General Objectives

This game was designed to focus attention on the specific experiences and attitudes which have grown to be known as "youth culture." The developers are extremely concerned over the serious lack of communication between members of different generations (i.e. generation gap). In *The Youth Culture Game*, they feel that a first step toward the solution of this problem may be accomplished only if participants are willing to accept and deal with others' tensions and emotions.

Content

"*The Youth Culture Game* links the game's theater style with that of the simulation game and with the subculture of youth, and the result is a total environment improvisational theater game." Participants are asked to take part in an improvisation based upon their entrance into a number of phases of youth culture. The contention of the developers is that affective understanding can best be achieved when students themselves act out specific roles. *The Youth Culture Game* involves total commitment to serious role playing, role reversal, and the simulation of real life situations.

Procedures

The preparation necessary for proper development of this theater game is indeed rigorous. *The Youth Culture Game* is actually an improvisational theater production. There are two types of roles involved: game operators and game players. The role of the operators is to get the game players involved in the youth culture. From six to eleven players are required for each operator. After familiarizing themselves with the background material, the game operators should hold a meeting of the entire cast, during which time everyone arrives at an understanding regarding specific roles, objectives of the game, and the various possible interpretations of youth culture. During the two to four weeks prior to the game, game operators should learn their roles during informal meetings and stage set designing activities. The actual improvisation begins with players being "born" into the game in the birth room, where they are blindfolded. One game operator distributes play money and briefly outlines the rules of the game. They proceed blindfolded along a rope until they reach the "family" area where blindfolds are removed. The family situation is designed to be sterile, and most players will move on to school, where they pass through simulated classes as many times as they wish. Although classes are designed to be dull, players may complete them several times to increase their probable future salaries. Enrollment in the school is limited; some players must go to the job market or to some other area of the game. The areas of Birth, Family, School, and Job Market are all part of the "Mainstream" of the society. When students are about to enter the Job Market, game operators and representatives from the areas of the Dope Room, Political Activists, the Commune, and Gangs put their pressures on youth to follow their precepts. At the same time the dominant society attempts to retrieve its "lost" youth through various pressures such as the Mental Health Clinic, Army, and Jail. By the end of the game, most players will have participated in several youth culture areas. The coordinator designates a time when play ends and the evalution procedure begins. During debriefing, players form small groups, analyze the roles played, the reality of the situation, and implications for future communication between youth and adults. After approximately ten minutes, the entire group is reassembled to openly discuss the game. The objective of this procedure is to begin communication. The developers hope that both players and operators will begin to think about and promote structures to continue this dialogue.

Evaluative Comments and Suggestions

The Youth Culture Game was designed to be played by adults wishing to gain an understanding of the youth culture; however, high school students in grades 10 through 12 can use the activity to establish their individual positions within the youth culture. The time periods of 60 to 90 minutes may be impractical in high school classes. The preparation time is also somewhat demanding for the high school program. A serious weakness of the game is the total reliance on theatrical improvisation as its central technique. Students could easily wander through the entire exercise without becoming truly involved, performing the requirements of the game without understanding its affective objectives. The lack of objective criteria for determining adult roles may also undermine the reality of the situation. The developers' view that the majority of American youth is alienated from the mainstream of society, is a biased one. It is possible for players to conclude that the "Mainstream" is always antithetical to all young people's needs and desires rather than to perceive that some young people who identify with a particular "youth culture" need understanding. In spite of its drawbacks, *The Youth Culture Game* can be useful if the realities can be adequately portrayed and if student preparation can be satisfactorily achieved.

GAMES AND SIMULATIONS: CROSS REFERENCES

Developer

- Abt Associates, Inc.
  - **Culture Contact**
  - **Grand Strategy**
  - **Pursuit**
- Allen, Layman
  - **Queries 'n Theories**
- Allen, Robert W.
  - **Propaganda**
- Boocock, Sarane S.
  - **Generation Gap**
  - **Life Career**
- Callahan, Loel
  - **Youth Culture Game, The**
- Cherryholmes, Cleo H.
  - **Inter-Nation Simulation Kit**
- Coleman, James S.
  - **Democracy**
  - **Economic System**
- Collins, Bert
  - **Ecology**
- Crawford, Jack
  - **Triangle Trade**
- Creative Communications and Research
  - **Confrontation**
- DalPorto, David N.
  - **Radicals vs Tories**
- Davis, James E.
  - **Transact**
- DeKock, Paul
  - **Disunia**
  - **Sunshine**
- Dodge, Dorothy
  - **Mulberry**
- Durham, Russ
  - **Abolition**
  - **Hard Rock Mine Strike**
  - **Triangle Trade**
- Durham, Virginia
  - **Abolition**
  - **Hard Rock Mine Strike**
- Education Development Center
  - **Armada**
  - **Empire, Game of**
- Fischer, Stephen J.
  - **Inner-City Planning**
- Gillespie, Judith A.
  - **City Hall**
  - **Influence**
- Gordon, Alice Kaplan
  - **American History Games**
- Greene, Lorne
  - **Propaganda**
- Guetzkow, Harold
  - **Inter-Nation Simulation Kit**
- Harris, T. Robert
  - **Economic System**
- Helburn, Suzanne Wiggins
  - **Transact**
- High School Geography Project
  - **Farming, The Game of**
  - **Portsville**
- Hubbell, Stephen P.
  - **Extinction**
- Industrial Relations Center
  - **Market**
- Instructional Simulations, Inc. (ISI)
  - **Campaign**
  - **Czar Power**
  - **Family Life Income Patterns (FLIP)**
  - **System 1**
  - **Tracts**
- Jordan, E. Eileen
  - **Wheels**
- Kugel, Peter
  - **Queries 'n Theories**
- Lawson, Barry R.
  - **New Town**
- Lipetzky, Jerry
  - **Dig**
- Lockheed Aircraft Corporation
  - **Drug Attack**
- Mastrude, Roger G.
  - **Dangerous Parallel**
- Montgomery, Raymond A., Jr.
  - **Inner-City Planning**
- Murphy, James W.
  - **Wheels**
- Olcott Forward Publishers, Inc.
  - **Union Divides, The**
- Peterson, Arthur
  - **Peace**
- Piret, Margie
  - **Ecology**
- Powell, Jimmie
  - **Mulberry**
- Psychology Today Magazine
  - **Blacks and Whites**
- Rasmussen, Frederick A.
  - **Redwood Controversy, The**
- Rausch, Erwin
  - **Economic Decision Games**
- Reese, Jay
  - **Explorers I**
  - **Roaring Camp**
- Rosen, Richard
  - **Ecology**
- Ross, Joan
  - **Queries 'n Theories**
- Schild, Erling O.
  - **Generation Gap**
- Shaftel, Fannie
  - **People in Action**
  - **Values in Action**
  - **Words and Action**

- Shaftel, George
  - **People in Action**
  - **Values in Action**
  - **Words and Action**
- Shirts, R. Garry
  - **Metropolitics**
  - **Powderhorn**
  - **Starpower**
- Short, Ronald W.
  - **College Game, The**
- Smith, Daniel Caleb
  - **Trade-Off at Yalta**
- Synectics Education Systems
  - **Hang Up**
- Theis, Paul A.
  - **Hat in the Ring**
- Thorpe, Gerald L.
  - **Conflict**
- Toll, Dove
  - **Ghetto**
- Twelker, Paul
  - **Pollution**
- Unitarian Universalist Association
  - **Hang Up**
- Urban Systems, Inc.
  - **Litterbug**
- Wesley, John
  - **Discovery**
  - **Ecopolis**
  - **Equality**
- Western Behavioral Sciences Institute (WBSI)
  - **Crisis**
  - **Napoli**
  - **Sitte**
- Wilcoxson, Georgeann
  - **Baldicer**
- Yount, David
  - **Disunia**
  - **Sunshine**
- Zahn, Donald M.
  - **Hat in the Ring**
- Zaltman, Gerald
  - **Consumer**

Grade Level

Kindergarten
- **Litterbug**
- **Words and Action**

Grade 1
- **Litterbug**
- **People in Action**
- **Words and Action**

Grade 2
- **Litterbug**
- **People in Action**
- **Words and Action**

Grade 3
- **People in Action**
- **System 1**

Grade 4
- **Discovery**
- **Ecopolis**
- **Equality**
- **Explorers I**
- **People in Action**
- **Roaring Camp**
- **System 1**
- **Values in Action**

Grade 5
- **Discovery**
- **Ecopolis**
- **Equality**
- **Explorers I**
- **Hat in the Ring**
- **Powderhorn**
- **Roaring Camp**
- **System 1**
- **Values in Action**

Grade 6
- **Baldicer**
- **Culture Contact**
- **Dig**
- **Discovery**
- **Drug Attack**
- **Ecology**
- **Ecopolis**
- **Equality**
- **Explorers I**
- **Extinction**
- **Generation Gap**
- **Hang Up**
- **Hat in the Ring**
- **Market**
- **Powderhorn**
- **Roaring Camp**
- **System 1**
- **Values in Action**

Grade 7
- **Abolition**
- **Baldicer**
- **Blacks and Whites**
- **Consumer**
- **Crisis**
- **Culture Contact**
- **Dangerous Parallel**
- **Democracy**
- **Dig**
- **Drug Attack**
- **Ecology**
- **Economic System**
- **Ecopolis**
- **Empire, Game of**
- **Equality**
- **Extinction**
- **Farming, The Game of**
- **Generation Gap**
- **Ghetto**
- **Grand Strategy**
- **Hang Up**
- **Hard Rock Mine Strike**
- **Hat in the Ring**
- **Market**
- **Metropolitics**
- **Napoli**
- **New Town**
- **Peace**
- **Pollution**
- **Portsville**
- **Powderhorn**
- **Propaganda**
- **Pursuit**
- **Queries 'n Theories**
- **Radicals vs Tories**

GAMES AND SIMULATIONS: CROSS REFERENCES

Redwood Controversy, The
Roaring Camp
Sitte
Starpower
System 1
Tracts
Trade-Off at Yalta
Triangle Trade
Union Divides, The

Grade 8

Abolition
American History Games
Armada
Baldicer
Blacks and Whites
Confrontation
Consumer
Crisis
Culture Contact
Dangerous Parallel
Democracy
Dig
Drug Attack
Ecology
Economic System
Ecopolis
Empire, Game of
Equality
Extinction
Family Life Income Patterns (FLIP)
Farming, The Game of
Generation Gap
Ghetto
Grand Strategy
Hang Up
Hard Rock Mine Strike
Hat in the Ring
Life Career
Market
Metropolitics
Napoli
New Town
Peace
Pollution
Portsville
Powderhorn
Propaganda
Pursuit
Queries 'n Theories
Radicals vs Tories
Redwood Controversy, The
Sitte
Starpower
System 1
Tracts
Trade-Off at Yalta
Triangle Trade
Union Divides, The

Grade 9

Abolition
American History Games
Armada
Baldicer
Blacks and Whites
City Hall
Confrontation
Consumer
Crisis
Culture Contact
Czar Power
Dangerous Parallel
Democracy
Dig
Disunia
Drug Attack
Ecology
Economic System
Ecopolis
Empire, Game of
Extinction
Family Life Income Patterns (FLIP)
Farming, The Game of
Generation Gap
Ghetto
Grand Strategy
Hang Up
Hard Rock Mine Strike
Hat in the Ring
Influence
Inner-City Planning
Inter-Nation Simulation Kit
Life Career
Metropolitics
Napoli
New Town
Peace
Pollution
Portsville
Propaganda
Pursuit
Queries 'n Theories
Radicals vs Tories
Redwood Controversy, The
Sitte
Starpower
Sunshine
System 1
Tracts
Trade-Off at Yalta
Transact
Triangle Trade
Union Divides, The

Grade 10

Abolition
American History Games
Armada
Baldicer
Blacks and Whites

- Campaign
- City Hall
- College Game, The
- Conflict
- Confrontation
- Consumer
- Crisis
- Culture Contact
- Czar Power
- Dangerous Parallel
- Democracy
- Dig
- Disunia
- Economic System
- Ecopolis
- Empire, Game of
- Extinction
- Family Life Income Patterns (FLIP)
- Farming, The Game of
- Generation Gap
- Ghetto
- Grand Strategy
- Hang Up
- Hard Rock Mine Strike
- Hat in the Ring
- Influence
- Inner-City Planning
- Inter-Nation Simulation Kit
- Life Career
- Metropolitics
- Mulberry
- Napoli
- New Town
- Peace
- Pollution
- Portsville
- Propaganda
- Queries 'n Theories
- Radicals vs Tories
- Redwood Controversy, The
- Sitte
- Starpower
- Sunshine
- System 1
- Tracts
- Trade-Off at Yalta
- Transact
- Triangle Trade
- Union Divides, The
- Wheels
- Youth Culture Game, The

Grade 11

- Abolition
- American History Games
- Armada
- Baldicer
- Blacks and Whites
- Campaign
- City Hall
- College Game, The
- Conflict
- Confrontation
- Consumer
- Crisis
- Culture Contact
- Czar Power
- Dangerous Parallel
- Democracy
- Dig
- Disunia
- Economic System
- Empire, Game of
- Extinction
- Family Life Income Patterns (FLIP)
- Farming, The Game of
- Generation Gap
- Ghetto
- Grand Strategy
- Hang Up
- Hard Rock Mine Strike
- Hat in the Ring
- Influence
- Inner-City Planning
- Inter-Nation Simulation Kit
- Life Career
- Metropolitics
- Mulberry
- Napoli
- New Town
- Peace
- Pollution
- Portsville
- Propaganda
- Queries 'n Theories
- Radicals vs Tories
- Redwood Controversy, The
- Sitte
- Starpower
- Sunshine
- System 1
- Tracts
- Trade-Off at Yalta
- Transact
- Triangle Trade
- Union Divides, The
- Wheels
- Youth Culture Game, The

Grade 12

- Abolition
- American History Games
- Armada
- Baldicer
- Blacks and Whites
- Campaign
- City Hall
- College Game, The
- Conflict
- Confrontation
- Consumer
- Crisis
- Culture Contact
- Czar Power
- Dangerous Parallel
- Democracy
- Dig
- Disunia
- Economic Decision Games
- Economic System
- Empire, Game of
- Extinction
- Family Life Income Patterns (FLIP)
- Farming, The Game of
- Generation Gap
- Ghetto
- Grand Strategy
- Hang Up
- Hard Rock Mine Strike
- Hat in the Ring

GAMES AND SIMULATIONS: CROSS REFERENCES

  - **Influence**
  - **Inner-City Planning**
  - **Inter-Nation Simulation Kit**
  - **Life Career**
  - **Metropolitics**
  - **Mulberry**
  - **Napoli**
  - **New Town**
  - **Peace**
  - **Pollution**
  - **Portsville**
  - **Propaganda**
  - **Queries 'n Theories**
  - **Radicals vs Tories**
  - **Redwood Controversy, The**
  - **Sitte**
  - **Starpower**
  - **Sunshine**
  - **System 1**
  - **Tracts**
  - **Trade-Off at Yalta**
  - **Transact**
  - **Triangle Trade**
  - **Union Divides, The**
  - **Wheels**
  - **Youth Culture Game, The**
- **Grades 13-14**
  - **City Hall**
  - **Czar Power**
  - **Influence**
  - **Mulberry**
  - **Napoli**
  - **Peace**
  - **Transact**
- **Adults**
  - **Baldicer**
  - **Blacks and Whites**
  - **Campaign**
  - **Conflict**
  - **Consumer**
  - **Crisis**
  - **Dangerous Parallel**
  - **Dig**
  - **Disunia**
  - **Economic Decision Games**
  - **Economic System**
  - **Extinction**
  - **Family Life Income Patterns (FLIP)**
  - **Ghetto**
  - **Hang Up**
  - **Hard Rock Mine Strike**
  - **Hat in the Ring**
  - **Inter-Nation Simulation Kit**
  - **Metropolitics**
  - **New Town**
  - **Pollution**
  - **Propaganda**
  - **Queries 'n Theories**
  - **Sitte**
  - **Starpower**
  - **System 1**
  - **Tracts**

Publisher

- Abt Associates, Inc.
  - **Culture Contact**
  - **Grand Strategy**
- Addison-Wesley Publishing Company, Inc.
  - **Transact**
- Amidon, Paul S. and Associates, Inc.
  - **Mulberry**
  - **Wheels**
- Benefic Press
  - **Market**
- Creative Communications and Research
  - **Confrontation**
- Denoyer-Geppert Company
  - **Armada**
  - **Empire, Game of**
- Ginn and Company
  - **City Hall**
  - **Influence**
- Harwell Associates
  - **New Town**
- History Simulations
  - **Radicals vs Tories**
- Holt, Rinehart and Winston, Inc.
  - **People in Action**
  - **Values in Action**
  - **Words and Action**
- Houghton-Mifflin Company
  - **Redwood Controversy, The**
- Instructional Development Corporation
  - **Pollution**
- Instructional Simulations, Inc. (ISI)
  - **Campaign**
  - **Czar Power**
  - **Family Life Income Patterns (FLIP)**
  - **System 1**
  - **Tracts**
- Interact Company
  - **Dig**
  - **Discovery**
  - **Disunia**
  - **Ecopolis**
  - **Equality**
  - **Peace**
  - **Sunshine**
- The Kiplinger Washington Editors, Inc.
  - **Hat in the Ring**
- John Knox Press
  - **Baldicer**
- The Macmillan Company
  - **Farming**
  - **Inner-City Planning**
  - **Portsville**

- Olcott Forward Publishers, Inc.
  - **Union Divides, The**
- Psychology Today Games
  - **Blacks and Whites**
- Random House
  - **Abolition**
  - **Hard Rock Mine Strike**
- Reader's Digest Services, Inc.
  - **Pursuit**
- Science Research Associates, Inc.
  - **American History Games**
  - **Economic Decision Games**
  - **Inter-Nation Simulation Kit**
- Scott Foresman and Company
  - **Dangerous Parellel**
- Scott Graphics, Inc.
  - **Trade-Off at Yalta**
- Short, Ronald W.
  - **College Game, The**
- Simile II
  - **Conflict**
  - **Crisis**
  - **Explorers I**
  - **Metropolitics**
  - **Napoli**
  - **Powderhorn**
  - **Roaring Camp**
  - **Sitte**
  - **Starpower**
- Simulation Systems Program
  - **Triangle Trade**
- Sinauer Associates, Inc.
  - **Extinction**
- Synectics Education Systems
  - **Hang Up**
- Technicon Education Systems
  - **Drug Attack**
- Urbandyne
  - **Youth Culture Game, The**
- Urban Systems, Inc.
  - **Ecology**
  - **Litterbug**
- Western Publishing Company, Inc.
  - **Consumer**
  - **Democracy**
  - **Economic System**
  - **Generation Gap**
  - **Ghetto**
  - **Life Career**
- Wff 'n Proof Publishers
  - **Propaganda**
  - **Queries 'n Theories**

Subject Area

- American History
  - **Abolition**
  - **American History Games**
  - **Discovery**
  - **Disunia**
  - **Empire, Game of**
  - **Equality**
  - **Farming, The Game of**
  - **Hard Rock Mine Strike**
  - **Peace**
  - **Portsville**
  - **Pursuit**
  - **Radicals vs Tories**
  - **Roaring Camp**
  - **Sunshine**
  - **Trade-Off at Yalta**
  - **Triangle Trade**
  - **Union Divides, The**
- Anthropology
  - **Culture Contact**
  - **Dig**
- Applicable to any area
  - **System 1**
- Behavioral Science
  - **Propaganda**
- Biological Science
  - **Extinction**
- Civil Rights
  - **Pursuit**
- Communication Skills
  - **Words and Action**
- Consumer Economics
  - **Consumer**
- Contemporary Economic Problems
  - **Economic System**
- Contemporary Problems
  - **Confrontation**
  - **Equality**
  - **Extinction**
  - **Ghetto**
  - **Inter-Nation Simulation Kit**
  - **Redwood Controversy, The**
  - **Sunshine**
- Contemporary Urban Problems
  - **Inner-City Planning**
- Ecology
  - **Ecology**
  - **Extinction**
  - **Litterbug**
  - **Pollution**
- Economics
  - **Baldicer**
  - **Economic Decision Games**
  - **Economic System**
  - **Ecopolis**
  - **Family Life Income Patterns (FLIP)**
  - **Farming, The Game of**
  - **Market**
  - **Transact**
  - **Wheels**
- English
  - **Propaganda**
- Environmental Education
  - **Ecopolis**
  - **New Town**
- Geography
  - **Discovery**
  - **Explorers I**
  - **Farming, The Game of**
  - **Portsville**
  - **Redwood Controversy, The**
  - **Tracts**
- Health Education
  - **Drug Attack**
- History
  - **Armada**
  - **Czar Power**
  - **Ecology**
  - **Ecopolis**
  - **Explorers I**

GAMES AND SIMULATIONS: CROSS REFERENCES

  - **Powderhorn**
- Human Relations
  - **College Game, The**
  - **Generation Gap**
  - **Hang Up**
  - **Life Career**
  - **People in Action**
  - **Values in Action**
- Interdisciplinary
  - **Ecopolis**
  - **Propaganda**
  - **Tracts**
- International Relations
  - **Conflict**
  - **Crisis**
  - **Dangerous Parallel**
  - **Grand Strategy**
  - **Inter-Nation Simulation Kit**
  - **Peace**
  - **Trade-Off at Yalta**
- Labor Relations
  - **Hard Rock Mine Strike**
- Language Development
  - **Words and Action**
- Linguistics
  - **Queries 'n Theories**
- Logic
  - **Propaganda**
- Political Science
  - **Baldicer**
  - **Campaign**
  - **City Hall**
  - **Conflict**
  - **Confrontation**
  - **Czar Power**
  - **Dangerous Parallel**
  - **Democracy**
  - **Disunia**
  - **Ecopolis**
  - **Hard Rock Mine Strike**
  - **Hat in the Ring**
  - **Influence**
  - **Inner-City Planning**
  - **Inter-Nation Simulation Kit**
  - **Metropolitics**
  - **Mulberry**
  - **Napoli**
  - **New Town**
  - **Powderhorn**
  - **Propaganda**
  - **Redwood Controversy, The**
  - **Starpower**
  - **Tracts**
  - **Union Divides, The**
- Psychology
  - **Drug Attack**
  - **Hang Up**
  - **Propaganda**
- Science
  - **Redwood Controversy, The**
- Scientific Method
  - **Queries 'n Theories**
- Social Problems
  - **Drug Attack**
  - **People in Action**
  - **Values in Action**
  - **Words and Action**
- Sociology
  - **Baldicer**
  - **Blacks and Whites**
  - **Campaign**
  - **College Game, The**
  - **Confrontation**
  - **Culture Contact**
  - **Czar Power**
  - **Discovery**
  - **Drug Attack**
  - **Ecopolis**
  - **Equality**
  - **Generation Gap**
  - **Ghetto**
  - **Hang Up**
  - **Inner-City Planning**
  - **Pollution**
  - **Propaganda**
  - **Tracts**
  - **Youth Culture Game, The**
- Urban Problems
  - **Mulberry**
  - **Sitte**
- Urban Studies
  - **Equality**
  - **New Town**
  - **Metropolitics**
  - **Portsville**
  - **Tracts**
- Values Clarification
  - **Values in Action**
- War/Peace Studies
  - **Inter-Nation Simulation Kit**
- World History
  - **Inter-Nation Simulation Kit**
  - **Trade-Off at Yalta**

Miscellaneous

- Abt Associates, Inc.
  - **American History Games**
- Academic Games Associates, Inc.
  - **Consumer**
  - **Democracy**
  - **Economic System**
  - **Generation Gap**
  - **Ghetto**
  - **Life Career**

- Association of American Geographers
  - **Farming, The Game of**
  - **Portsville**
- Chicago, University of
  - **Market**
- Creative Communications and Research
  - **Confrontation**
- Creative Studies, Inc.
  - **Inner-City Planning**
- Damon Education Company
  - **Ecology**
  - **Litterbug**
- Didactic Systems, Inc.
  - **Economic Decision Games**
- Elementary Economics Project
  - **Market**
- Foreign Policy Association
  - **Dangerous Parallel**
- From Subject to Citizen
  - **Armada**
  - **Empire, Game of**
- Indiana University
  - **City Hall**
  - **Influence**
- Johns Hopkins Unviersity
  - **Consumer**
  - **Democracy**
  - **Economic System**
  - **Generation Gap**
  - **Ghetto**
  - **Life Career**
- Nova Academic Games Project
  - **Propaganda**
- Social Studies Development Center
  - **City Hall**
  - **Influence**
- World Law Fund, The
  - **Conflict**

ABBREVIATED GAMES AND SIMULATIONS GUIDE

Title	Grade Level	Subject Area	No. of Players	Time	Price
ABT ASSOCIATES, INC., 55 Wheeler Street, Cambridge, Mass. 02138					
***Culture Contact**	6 to 12	Anthropology, Sociology	20-30	2-5 hr.	$ 30.00
Edplan	10 to adult	Civics, Economics	29-36	3-5 hr.	$ 25.00
***Grand Strategy**	7 to 12	International Relations, World War I	10-30	1-2 hr.	$ 25.00
Help	3 to 6	Communications	5-32	1-2 hr.	$ 15.00
Innocent Until	6 to 12	Civics, Law	13-30	3-5 hr.	$ 30.00
Neighborhood	3 to 10	Civics, Urban Problems	4-12	3-5 hr.	$ 16.00
Pollution	3 to 8	Civics, Ecology	12-16	2-4 hr.	$ 24.00
Potlatch Game	6 to 12	Anthropology, Indian Culture	18-30	2-4 hr.	$ 60.00
Raid	7 to 12	Urban Problems	5-15	1-3 hr.	$ 25.00
Settle or Strike	10 to adult	Labor vs. Management, American History	24-32	3-6 hr.	$ 40.00
Simpolis	9 to adult	Urban Problems	30-50	1-3 hr.	$ 30.00
To Drink or Not To Drink	7 to adult	Health Education	5-15	2-3 hr.	$ 35.00
Transportation	3 to 6	Geography, Economics	8-34	1-2 hr.	$ 16.00
ACADEMIC GAMES ASSOCIATES, INC., 430 East Thirty-third St., Baltimore, Md. 21218					
The Drug Debate	7 to 12	Drug Problem	20-35	1 hr.	$ 27.00
Trade and Develop	6 to 9	International Trade	6-10	½-1 hr.	$ 9.95
ADDISON-WESLEY PUBLISHING COMPANY, INC., 2725 Sand Hill Road, Menlo Park, California 94025					
***Transact**	9 to 14	Economics	20-48	½-1 hr.	$ 6.00
AMERICAN EDUCATION PUBLICATIONS, 55 High Street, Middletown, Conn. 06457					
Railroad Game	7 to 12	Big Business, American History	10-35	1-3 hr.	$ .40 (per student)
AMIDON, PAUL S. AND ASSOCIATES, INC., 5408 Chicago Ave. South, Minneapolis, Minnesota 55417					
***Mulberry**	7 to 12	Urban Renewal	20-35	2-4 hr.	$ 50.00
***Wheels**	10 to 12	Economics	2-35	1-2 hr.	$ 40.00
ART FAIR DIVISION OF FLAG HOUSE, 84th Ave., New York, New York 10024					
Ethics	7 to adult	Human Relations, Values	3-any number	1-5 hr.	$ 3.00
Shrink	7 to adult	Human Relations, Values	3-any number	1-5 hr.	$ 3.00
AUSTIN WRITERS GROUP, P.O. Box 12642, Capitol Station, Austin, Texas 78711					
Drug Abuse	7 to adult	Sociology, Drug Education	2-4	6-7 hr.	$ 3.95
BENEFIC PRESS, 10300 West Roosevelt Rd., Westchester, Illinois 60153					
***Market**	6 to 9	Economics	10-35	1-3 hr.	$ 54.40
BRITE GAMES, Box 371, Moline, Illinois 61265					
Last Time, The	7 to adult	World History	14-38	1-3 hr.	$ 10.00
Take Off	10 to adult	International Affairs, Third World	12-35	1-3 hr.	$ 7.50
CALGARY COMMUNITY INSTITUTE #107, 803 First Street S.E., Calgary, Alberta, Canada					
Today . . . and Maybe Tomorrow	9 to adult	Sociology, Community Survival	12-120	3-10 hr.	$ 25.00
CAMP, CHARLES W., 125 Summer St., Amherst, Massachusetts 01002					
Web, The	7 to adult	Human Relations, Racism	12-35	2-4 hr.	$ 5.00
CDCC, Box 262, Campbell, California 95008					
Cruel, Cruel World	10 to adult	Human Relations, Value Conflict	2-4	1-3 hr.	$ 8.50
My Cup Runneth Over	7 to adult	Human Relations, Interpersonal Relations	2-4	1-3 hr.	$ 8.50
Timao	10 to adult	Human Relations, Value Analysis	Any number	1-3 hr.	$ 4.00

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Title	Grade Level	Subject Area	No. of Players	Time	Price
CLASSROOM DYNAMICS, 231 O'Connor Drive, San Jose, Calif. 95128					
Micro-Community	7 to adult	Economics, American History	20-35	180 hr.	$ 39.50
CREATIVE COMMUNICATIONS AND RESEARCH, 460 35th Avenue, San Francisco, California 94121					
*Confrontation	8 to adult	Sociology, Student Protest	4-40	1-3 hr.	$ 4.95
The Lib Game	8 to adult	Sociology, Women's Liberation	4-40	1-3 hr.	$ 3.95
CUNA MUTUAL INSURANCE SOCIETY, P.O. Box 391, Madison, Wisconsin 53701					
Managing Your Money	6 to 12	Consumer Economics	2-6	1-3 hr.	$ 2.50
CURRENT AFFAIRS FILMS, 527 Madison Avenue, Box 72, New York, New York 10022					
Confrontation: The Cuban Missile Crisis	10 to adult	International Relations, Diplomacy	10-30	1-3 hr.	$150.00
DAMON EDUCATION COMPANY, 80 Wilson Way, Westwood, Mass. 02090					
Clean Up	1 to 3	Ecology	2-6	½-1 hr.	$ 5.00
Dirty Water	4 to 6	Water Pollution	2-8	1-3 hr.	$ 10.00
*Ecology	6 to 9	Man and Nature	2-4	1-3 hr.	$ 10.00
*Litterbug	K to 2	Ecology	2-4	½-1 hr.	$ 5.00
Population	8 to 12	Overpopulation	2-6	1-2 hr.	$ 10.00
Predator Prey	3 to 8	Ecology	3-6	1-2 hr.	$ 6.00
Smog	8 to 12	Air Pollution	2-8	1-3 hr.	$ 11.00
Women's Lib	11 to adult	Women's Rights	4-7	1-3 hr.	$ 8.50
DENOYER-GEPPERT COMPANY, 5235 Ravenswood Ave., Chicago, Illinois 60640					
*Armada	7 to 12	World History, Spanish Armada	15-36	1-3 hr.	$ 34.00
*Empire, Game of	7 to 12	American History, American Revolution	15-36	1-3 hr.	$ 49.95
DISTRIBUTION SERVICES, 47 Coldwater Road, Don Mills, Ontario, Canada					
People Power	7 to adult	Political Science, Local Politics	4-20	1-3 hr.	$ 1.00
EDUCATIONAL AUDIO VISUAL, INC., Pleasantville, New York 10570					
1787	9 to 12	American Government, Political Science	15-35	4-15 hr.	$ 20.50
*The Union Divides	7 to 12	American History	20-30	7-10 hr.	$ 28.50
EDUCATIONAL GAMES COMPANY, Box 363, Peekskill, N.Y. 10021					
Election	5 to 12	American Government, Political Science	4-8	1-2 hr.	$ 5.35
EDUCATIONAL VENTURES, INC., 209 Court St., Middletown, Connecticut 06457					
Community Decision Game: Budget and Taxes	6 to 12	Local Government	10-40	1-3 hr.	$ 4.95
Community Decision Game: New Highway	6 to 12	Urban Problems	10-40	1-3 hr.	$ 4.95
Community Decision Game: New School	6 to 12	Community Problems	10-40	1-3 hr.	$ 4.95
Community Decision Game: Open Space	6 to 12	Ecology, Land Use	10-40	1-3 hr.	$ 4.95
Garbage Game, The	5 to 10	Ecology	2-6	1-2 hr.	$ 7.00
Generation Rap	6 to 12	Sociology, Generation Gap	2-4	1-3 hr.	$ 8.00
Graphigame: Citizenship Attitudes	4 to 12	Civics, Political Science	15-30	2-7 hr.	$ 3.75
Graphigame: Do-It-Yourself	4 to 12	Any subject area	15-30	2-7 hr.	$ 3.75
Graphigame: Environmental Attitudes	4 to 12	Ecology	15-30	2-7 hr.	$ 3.75
Graphigame: Political Attitudes	4 to 12	Political Science	15-30	2-7 hr.	$ 3.75
Graphigame: War and Peace Attitudes	4 to 12	International Affairs	15-30	2-7 hr.	$ 3.75
Land Use Game, The	7 to 12	Ecology	2-6	1-3 hr.	$ 2.50
Origami Game, The	6 to adult	Human Relations, Self Assessment	3-any number	1-2 hr.	$ 7.00
Pink Pebbles	4 to 9	Economics	3-6	1-2 hr.	$ 8.00
Ring Toss Game, The	6 to adult	Human Relations, Self Assessment	2-any number	1-2 hr.	$ 7.50
Sacrifice, The Game of	7 to 12	Ecology, Local Government	10-100	2-5 hr.	$ 4.95
World Puzzle, The	4 to 12	Geography	1-30	1-7 hr.	$ 12.95
EL PASO PUBLIC SCHOOLS, Purchasing Department, P.O. Box 1710, El Paso, Texas 79999					
Tightrope	12 to adult	Fiscal and Monetary Policy	12-35	3-5 hr.	$ 2.00

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Title	Grade Level	Subject Area	No. of Players	Time	Price
ENTELEK, INC., 42 Pleasant Street, Newburyport, Mass. 01950					
Low Bidder	11 to 12	Economics, Construction Bidding	2-25	1 hr.	$ 10.00
Transaction	8 to 12	Economics, Stock-market Trading	2-25	1 hr.	$ 10.00
FAMILY PASTIMES, R.R. #4, Perth, Ontario, Canada					
Family	7 to adult	Sociology, Human Relations	3-50	3-5 hr.	$ 4.00
THE FREE PRESS, INC., 866 Third Avenue, New York, New York 10022					
CLUG (Community Land Use Game)	9 to adult	Urban Problems	12-40	3-9 hr.	$ 4.95
Simsoc	12 to adult	Sociology	20-60	5-8 hr.	$ 3.95
FRIENDSHIP PRESS, P.O. Box 37844, Cincinnati, Ohio 45237					
Values	7 to adult	Value Clarification	3-6	1-3 hr.	$ 5.95
GAMES RESEARCH, INC., 48 Wareham Street, Boston, Mass. 02118					
Convention	7 to 12	American Government, Political Science	2-12	1-3 hr.	$ 5.00
Diplomacy	8 to 12	International Relations	4-14	1-3 hr.	$ 8.00
Insight	7 to adult	Human Relations	2-20	1-3 hr.	$ 8.00
GINN AND COMPANY, 691 Spring Street, Lexington, Massachusetts 02173					
***City Hall**	8 to 14	Political Science	14-48	4-6 hr.	$ 6.33
***Influence**	8 to 14	Political Science	21-51	4-5 hr.	$ 6.33
Bottleneck	8 to 14	Political Science	4-72	3-5 hr.	
Ninth Justice	8 to 14	Political Science	4-48	2-4 hr.	$ 49.50 (Price includes Bottleneck)
GOOD TIME EDUCATORS, c/o Robert Reinke, Route 2, Monticello, Minnesota 55362					
Negotiate	7 to 12	Labor vs. Management	2-10	1-4 hr.	$ 5.00
Production	7 to 12	Economics	10-40	2-4 hr.	$ 5.00
Scarcity and Allocation	4 to 12	Economics	2-5	½-1 hr.	$ 5.00
Scarcity and the Market	7 to 12	Economics	2-4	½-1 hr.	$ 5.00
Survival	7 to 12	Economics	2-5	½-1 hr.	$ 5.00
HARWELL ASSOCIATES, INC., Box 95, Dover, New Jersey 07961					
***New Town**	7 to adult	Urban Planning	3-10	1-4 hr.	$ 16.00
HERDER AND HERDER, 232 Madison Avenue, New York, N.Y. 10021					
Down with the King	6 to 10	Political Science, Revolutions	8-35	3-5 hr.	$ 7.95
The Road Game	6 to 10	Economics, Construction Problems	8-35	1-2 hr.	$ 7.95
The Value Game	6 to 10	Sociology, Values	5-35	1-2 hr.	$ 7.95
HISTORY SIMULATIONS, D. N. DAL PORTO, P.O. Box 2775, Santa Clara, Calif. 95051					
Game of Brinksmanship	8 to 12	Political Science, The Cold War	20-40	3-5 hr.	$ 7.50
Haymarket Case	8 to 12	American History, Trial of 1886	25-55	5-6 hr.	$ 15.00
North vs South	8 to 12	American History	20-80	4-5 hr.	$ 10.00
***Radicals vs Tories**	7 to 12	American History	24-100	3-4 hr.	$ 10.00
Spanish American War	8 to 12	American History	30-100	5-6 hr.	$ 12.50
HOLT, RINEHART & WINSTON, INC., Media Department D-1, Box 3670, Grand Central Station, New York, N.Y. 10017					
Dynasty	7 to adult	History, Political Science, Economics, Sociology	4-8	2-6 hr.	$ 15.00
***People in Action**	2, 3	Social Problems	3-36	20-30 hr.	$ 50.40
***Values in Action**	4 to 6	Social Problems	3-36	6-18 hr.	$103.95
***Words and Action**	K, 1	Social Problems	3-36	4-10 hr.	$ 28.50

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HOUGHTON-MIFFLIN COMPANY, 110 Tremont Street, Boston, Mass. 02107					
The Planet Management Game	6 to 10	Ecology	2-5	½-1 hr.	$ 12.00
Pollution Game	7 to 12	Ecology (Pollution)	2-4	1-3 hr.	$ 9.00
***The Redwood Controversy**	7	Contemporary Problems	9-36	2-3 hr.	$ 7.50
HOUSE OF GAMES CORP., LTD., 3135 Universal Drive, Toronto, Ontario, Canada					
Ulcers	7 to adult	Economics	2-4	1-3 hr.	$ 6.00
HRW ASSOCIATES, P.O. Box 2634, Anaheim, Calif. 92804					
Buck Stops Here	7 to 12	Political Science	20-30	2-3 hr.	$ 3.00
Middle East	7 to 12	International Relations	20-30	2-3 hr.	$ 3.00
Ungawa	7 to 12	International Relations	20-30	2-3 hr.	$ 3.00
INFORMATION RESOURCES, INC., P.O. Box 417, Lexington, Massachusetts 02173					
Participative Decision-Making	10 to adult	Human Relations	6-20	24 hr.	$ 1.00 (Set of 6)
INSTITUTE OF APPLIED ART, LTD., 10042 109 Street, Edmonton, Alberta, Canada					
Arctic Island Petroleum Exploration	7 to 12	Business	4-35	1-3 hr.	$ 10.00
Metro Government	7 to 12	Political Science, Canada City Government	20-35	5-12 hr.	$ 15.00
On Economic and Social Planning in Developing Countries	7 to 12	International Development, Economics	2-40	1-6 hr.	$ 10.00
Quarterback	5 to 12	Any subject area	12-35	1-10 hr.	$ 7.95
Welcome	7 to 12	Urban Problems	20-35	3-7 hr.	$ 20.00
INSTRUCTIONAL DEVELOPMENT CORP., 7708 O'Neill Road North, Salem, Oregon 97305					
Conducting Planning Exercises	9 to adult	Problem Solving, Sociology, Group Dynamics	16-36	1-2 hr.	$ 4.00
***Pollution: Negotiating a Clean Environment**	7 to adult	Ecology	4-32	1 hr.	$ 22.50
Power Politics	8 to 12	American Government, Political Science, Political Campaigning	20-40	1-3 hr.	$ 28.50
INSTRUCTIONAL SIMULATIONS, INC., 2147 University Ave., St. Paul, Minnesota 55114					
***Campaign**	10 to adult	Political Science	23-40	15-20 hr.	$125.00
***Czar Power**	9 to adult	History	20-30	10-15 hr.	$ 22.50
Decision I	8 to adult	Decision Making	4-8	2-5 hr.	$ 4.50
Female Images	11 to adult	Self-Identity	4-8	2-5 hr.	$ 18.75
***F.L.I.P.**	8 to adult	Economics, Family Budget	2-60	3-4 hr.	$ 35.00
Impact	10 to adult	Urban Problems	20-40	10-30 hr.	$160.00
In-Force	10 to adult	Sociology	25-35	10-25 hr.	$ 65.00
No Dam Action	9 to adult	Sociology, Ecology	20-40	8-25 hr.	$ 85.00
Objectives I	8 to adult	Goal Setting	4-8	2-5 hr.	$ 4.50
Power Plans	8 to adult	Political Science	4-8	2-5 hr.	$ 4.50
***Systems I**	3 to adult	Any subject area	2-4	1-2 hr.	$ 11.85
***Tracts**	7 to adult	Geography, Political Science, Sociology, Urban Problems	8-48	4-5 hr.	$ 42.50
INTERACT, P.O. Box 262, Lakeside, California 92040					
Balance	8 to adult	Ecology	20-40	15-45 hr.	$ 10.00
Cope	8 to adult	Future Studies	20-40	20-25 hr.	$ 10.00
Destiny	8 to adult	Political Science	20-40	15-45 hr.	$ 10.00
***Dig**	6 to adult	Archaeology	14-36	15-45 hr.	$ 10.00
***Discovery**	4 to 9	American History	20-40	26-30 hr.	$ 10.00
***Disunia**	9 to adult	American History, American Government	20-35	15-45 hr.	$ 10.00
Division	8 to adult	Political Science, Election of 1860	20-40	15-45 hr.	$ 10.00
***Ecopolis**	4 to 8	Ecology	20-40	15-30 hr.	$ 10.00
Enterprise	10 to adult	Economics	20-40	15-30 hr.	$ 10.00
***Equality**	4 to 9	Social Discrimination	20-40	20-30 hr.	$ 10.00
Herstory	9 to adult	Male-Female Roles	20-40	25-35 hr.	$ 10.00
Liberte'	9 to adult	Political Science, French Revolution	20-40	15-45 hr.	$ 10.00
Mahopa	4 to 7	Indian Culture	20-40	15-25 hr.	$ 10.00
Mission	8 to adult	Political Science, Vietnam War	20-40	15-45 hr.	$ 10.00
Moot	8 to adult	Political Science, Law	20-40	15-30 hr.	$ 10.00
Nuremberg	8 to adult	History, World War II	20-40	15-30 hr.	$ 10.00
Panic	8 to adult	Political Science, The Great Depression	20-40	15-45 hr.	$ 10.00
***Peace**	8 to adult	History, World War I	20-40	15-30 hr.	$ 10.00
Pressure	8 to adult	Local Politics	20-40	15-20 hr.	$ 10.00

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Puzzle	8 to adult	Historiography	20-40	15-20 hr.	$ 10.00
Search	8 to adult	Library Skills	20-40	15-30 hr.	$ 10.00
Strike	9 to adult	Labor vs. Management	20-40	15-45 hr.	$ 10.00
***Sunsnine**	9 to 12	American History, Discrimination	20-36	15-45 hr.	$ 10.00
INTERNATIONAL LEARNING CORPORATION, 245 SW 32nd St., Ft. Lauderdale, Fla. 33301					
In-Quest	7 to 12	Scientific Inquiry	2-4	2-8 hr.	$ 5.00
JOINT COUNCIL ON ECONOMIC EDUCATION, 1212 Avenue of the Americas, New York, N.Y. 10036					
Market Game	7 to 9	Economics	20-50	2-4 hr.	$ 1.75 (per student)
Marketplace	9 to adult	Economics	20-50	50 min.	$ 75.00
THE KIPLINGER WASHINGTON EDITORS, INC., 1729 H St. N.W., Washington, D.C. 20006					
Budgeting Game	7 to 12	Economics	8-40	2-4 hr.	$ 2.95
Coalition	7 to 12	Political Science	16-40	6-10 hr.	$ 17.95
Consumer Redress	7 to 12	Consumer Economics	15-35	1-2 hr.	$ 62.50
***Hat in the Ring**	5 to 12	Political Science, Nomination	3-26	1-2 hr.	$ 9.95
Share The Risk	7 [illegible] 12	Consumer Economics	8-40	3-5 hr.	$ 62.50
Swindle	7 to 12	Consumer Economics	12-35	1-2 hr.	$ 22.50
JOHN KNOX PRESS, Box 1176, Richmond, Virginia 23209					
Agenda	9 to 12	Church Politics	18-39	5-7 hr.	$ 15.00
***Baldicer**	6 to adult	World Affairs, Hunger	20-40	1½-3 hr.	$ 25.00
LINCOLN FILENE CENTER, Tufts University, Medford, Mass. 02155					
Conflict in the Middle East	9 to 12	International Relations	18-45	1-3 hr.	$ 2.50
THE MACMILLAN COMPANY, School Division, 866 Third Avenue, New York, New York 10022					
***Farming**	7 to 12	Geography	10-30	4-6 hr.	$ 29.25
***Inner-City Planning**	9 to 12	Urban Problems	12-40	4-6 hr.	$ 16.80
***Portsville**	7 to 12	Geography	4-24	8-10 hr.	$ 45.75
State Legislator	9 to 12	Role of Legislator	18-36	4-6 hr.	$ 20.25
Strike	9 to 12	Labor vs. Management	16-40	2-3 hr.	$ 10.20
Yes, But Not Here	9 to 12	Urban Problems	20-40	4-6 hr.	$ 11.25
MAFEX, 111 Barron Ave., Johnstown, Pennsylvania 15906					
Convention	7 to 12	Political Science	15-22	5-8 hr.	$ 22.50
MASCO, P.O. Box 382, Locust Valley, New York 11560					
The Games People Play	7 to 12	Human Relations, Psychology	1-8	1-2 hr.	$ 3.50
Perception Games	K to 12	Human Relations	1-8	1-2 hr.	$ 3.50
MEDIA INNOVATORS EXCHANGE, P.O. Box 4485, Anaheim, California 92803					
Little Business	7 to 12	Economics	20-35	2-8 hr.	$ 5.95
Money Faucet, The	7 to 12	Economics	20-35	3-10 hr.	$ 5.95
MERIDAN HOUSE, INC., 21 Charles St., Westport, Connecticut 06880					
Population	7 to 12	Sociology, Population Explosion	1-25	1-2 hr.	$ 15.95
MILLER PRODUCTIONS, INC., 800 West Avenue, Box 5584, Austin, Texas 78763					
YOU! Crisis Resolution Games	7 to adult	Human Relations, Social Problems	2-4	1-3 hr.	$ 12.50
OXFAM-AMERICA, INC., 509-1028 Connecticut Ave. N.W., Washington, D.C. 20036					
The Aid Committee	9 to 12	International Relations	20	4-6 hr.	free
The Development Game	7 to 12	International Relations	20-60	full day	free
PEOPLE ACTING FOR CHANGE TOGETHER OF NEW DETROIT, INC., 163 Madison St., Detroit, Michigan 48226					
Pact	7 to adult	Sociology, Class Structure	15-30	1-3 hr.	$ .50

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PSYCHOLOGY TODAY GAMES, 1330 Camino Del Mar, Del Mar, California 92014					
***Blacks and Whites**	7 to adult	Sociology	3-9	1-3 hr.	$ 6.95
Body Talk	7 to adult	Psychology, Human Relations	2-10	1-3 hr.	$ 5.95
Cities Game, The	7 to adult	Sociology	2-4	1-3 hr.	$ 6.95
Feel Wheel	7 to adult	Psychology, Human Relations	2-10	½-3 hr.	$ 6.95
Society Today	7 to adult	Sociology	2-8	1-3 hr.	$ 7.95
Woman and Man	7 to adult	Sociology	2-6	1-3 hr.	$ 7.95
RANDOM HOUSE, Westminster, Maryland 21157					
***Abolition**	7 to 12	American History	18-35	4-5 hr.	$ 35.00
***Hard Rock Mine Strike**	7 to adult	Labor vs. Management	11-35	2-3 hr.	$ 35.00
ROWLAND, JASPER M., 1545 Harmony Road, Akron, Ohio 44313					
Stockmarket	7 to 12	Economics	3-10	1-2 hr.	$ 6.98
SCIENCE RESEARCH ASSOCIATES, INC., 259 East Erie Street, Chicago, Illinois 60611					
***American History Games**	8 to 12	American History	25-35	25-30 hr.	$187.50
The American Constitutional Convention	11 to 12	American Government, Political Science	32-49	2-6 hr.	$ 1.08 (per student)
Banking	adult	Economics	3-42	2-4 hr.	$ 1.60 (per student)
Budgetary Process	adult	American Government, Political Science	20-35	2-6 hr.	$ 1.08 (per student)
The Community	adult	Economics	3-42	2-5 hr.	$ 1.72 (per student)
Congressional Committees	adult	American Government, Political Science	20-35	2-6 hr.	$ 1.08 (per student)
Congressmen at Work	adult	American Government, Political Science	20-25	2-6 hr.	$ 1.08 (per student)
***Economic Decision Games**	12 to adult	Economics	12-48	3-5 hr.	$ 10.20
The Firm	adult	Economics	6-42	2-5 hr.	$ 1.60 (per student)
International Trade	adult	Economics	6-42	2-5 hr.	$ 1.60 (per student)
***Inter-Nation Simulation Kit**	9 to adult	International Relations	14-50	10-30 hr.	$ 64.80
The Market	adult	Economics	3-42	2-5 hr.	$ 1.60 (per student)
National Economy	adult	Economics	3-42	2-5 hr	$ 1.60 (per student)
Presidential Election Campaign	adult	American Government, Political Science	20-35	2-6 hr.	$ 1.08 (per student)
Scarcity and Allocation	adult	Economics	3-42	2-5-hr.	$ 1.08 (per student)
SCOTT, FORESMAN AND COMPANY, 1900 East Lake Avenue, Glenview, Illinois 60025					
***Dangerous Parallel**	8 to adult	International Relations	18-36	5-9 hr.	$ 60.00
Power	7 to 12	Sociology, Political Science	9-35	4-7 hr.	$ 13.98
Where Do We Live	2 to 6	Geography	3-36	3-12 hr.	$ 19.80
SCOTT GRAPHICS, INC., Educational Division, 104 Lower Westfield Road, Holyoke, Massachusetts 01040					
***Trade-Off at Yalta**	7 to 12	American History, World History	12-30	2-5 hr.	$ 28.00
SHORT, RONALD W., 1005 Banbury Drive, Spokane, Washington 99218					
***The College Game**	10 to 12	Human Relations	3-15	1½-3 hr.	$ 15.00
SIMILE II, 1150 Silverado, La Jolla, California 92037					
Atlantis II	7 to adult	Structure of Society	1-50	1-10 hr.	$ 10.00
***Conflict**	10 to adult	International Relations	18-35	5-15 hr.	$ 50.00
***Crisis**	7 to adult	International Relations	18-25	1-10 hr.	$ 35.00
***Explorers I**	4 to 7	History	18-35	4-5 hr.	$ 4.50
Explorers II	4 to 7	History	18-35	4-5 hr.	$ 4.50
Guns or Butter	7 to adult	International Arms Race	18-28	1½-3 hr.	$ 25.00
Homesteaders	4 to 7	History	18-35	5-8 hr.	$ 10.00
Import	4 to 7	International Economics	18-35	5-10 hr.	$ 10.00
***Metropolitics**	7 to adult	Urban Problems	18-36	1-2 hr.	$ 25.00
***Napoli**	7 to adult	Political Science	18-25	2-5 hr.	$ 35.00
Plans	7 to adult	Political Science	18-25	3-8 hr.	$ 35.00
Police Patrol	7 to adult	Urban Problems, Police Relations	20-35	1-6 hr.	$ 10.00

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ABBREVIATED GAMES AND SIMULATIONS GUIDE

Title	Grade Level	Subject Area	No. of Players	Time	Price
*Powderhorn	5 to 8	Political Science, Use of Power	18-35	2-3 hr.	$ 12.50
*Roaring Camp	4 to 7	History	18-35	5-10 hr.	$ 10.00
*Sitte	7 to adult	Urban Problems	20-40	3-4 hr.	$ 35.00
*Starpower	10 to adult	Political Science	18-35	2-3 hr.	$ 25.00
SIMULATION SYSTEMS PROGRAM, United States International University, Instructional Development Division, P.O. Box 1028, Corvallis, Oregon 97330					
*Triangle Trade	7 to 12	Economics, History	15-44	3-4 hr.	$ 15.00
Waging Neutrality	9 to 12	History, World War I	15-33	2-4 hr.	$ 12.00
SINAUER ASSOCIATES, INC., 20 Second Street, Stamford, Conn. 06905					
*Extinction	6 to adult	Ecology	2-4	2-3 hr.	$ 11.95
SOCIAL EDUCATION MAGAZINE, National Council for the Social Studies, 1201 16th Street N.W., Washington, D.C. 20036					
Labor vs. Management	7 to 12	Labor Negotiations	20-35	1-2 hr.	free
War and Peace	7 to 12	International Relations	20-35	1-2 hr.	free
SOCIAL STUDIES SCHOOL SERVICE, 10000 Culver Blvd., Culver City, Calif. 90230					
Edu-Game Part I	7 to 12	Early American History	20-35	10-25 hr.	$ 5.00
Edu-Game Part II	7 to 12	Public Issues	20-35	10-25 hr.	$ 5.00
Edu-Game Part III	7 to 12	20th Century American History	20-35	10-25 hr.	$ 5.00
Involvement Part I	9 to 12	American History 1785-1865	20-35	6-18 hr.	$ 10.00
Involvement Part II	9 to 12	American History 1885-1945	20-35	6-18 hr.	$ 10.00
Involvement Part III	9 to 12	Decision Making in Public Issues	20-35	6-18 hr.	$ 10.00
STUDY-CRAFT EDUCATIONAL PRODUCTS, Tusson Research Center, Belle Chase, Louisiana 70037					
Transaction: The Wall Street Game	7 to adult	Economics	1-25	1-3 hr.	$ 10.00
SYNECTICS EDUCATION SYSTEMS, 121 Brattle Street, Cambridge, Mass. 02138					
*Hang Up	6 to adult	Sociology, Prejudice, Discrimination	2-6	2-4 hr.	$ 15.00
Prediction	7 to adult	Human Relations	3-6	1-5 hr.	$ 10.00
TECHNICON EDUCATION SYSTEMS, 590 E. Middlefield Rd., Mountain View, California 94040					
*Drug Attack	6 to 9	Health Education, Social Problems	3-5	2-3 hr.	$ 6.00
TRANSNATIONAL PROGRAMS CORP., 54 Main Street, Scottsville, New York 14546					
Probe	10 to adult	Guidance, Career Planning	3-20	3-5 hr.	$ 5.00
URBANDYNE, 5659 S. Woodlawn Avenue, Chicago, Ill. 60637					
Edge City College	7 to adult	Sociology, Operation of University	20-30	2-6 hr.	$ 30.00
Urban Dynamics	11 to adult	Urban Problems	12-20	3-7 hr.	$ 95.00
*Youth Culture Game, The	10 to adult	Sociology, Adolescent Society	20-80	2-6 hr.	$ 15.00
URBAN SYSTEMS, INC., 1033 Massachusetts Ave., Cambridge, Massachusetts 02138					
See Damon Education Company					
URBEX AFFILIATES, INC., 474 Thruston Road, Rochester, New York 14619					
Policy Negotiations	7 to adult	Group Tasks, Game Designing	12-40	3 hr. to several weeks	$ 50.00
They Shoot Marbles, Don't They?	8 to adult	Structure of Society	12-40	3-9 hr.	$ 40.00
W.A.L.R.U.S. (Water and Land Resources Use Simulation)	8 to adult	Ecology	5-35	4 hr. to several weeks	$ 75.00

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*Denotes games and simulations for which analyses have been written which are included in the Games and Simulations section of the **Data Book**.

Title	Grade Level	Subject Area	No. of Players	Time	Price
VAN NOSTRAND REINHOLD, LTD., 1410 Birchmount Road, Scarborough, Ontario, Canada					
Caucus: Canadian Politics in Action	7 to 12	Political Science	16-46	2-3 hr.	$ 49.95
WARMAC, P.O. Box 953, North Platte, Nebraska 69101					
The Great War	9 to 12	History of World War I	20-60	10-15 hr.	$ 7.50
WASHBURN, JOHN, P.O. Box 6855, Santa Rosa, California 95406					
Jabberwocky	7 to adult	Any subject area	6-35	1-3 hr.	$ 20.00
Medialog	7 to adult	Human Relations	6-35	1-3 hr.	$ 3.00
WESTERN PUBLISHING COMPANY, INC., Education Division, 850 3rd Avenue, New York, N.Y. 10022					
*Consumer	7 to adult	Consumer Economics	11-34	1-2 hr.	$ 30.00
*Democracy	7 to 12	American Government, Political Science, Legislative Process	6-11	1-5 hr.	$ 8.00
*Economic System	9 to 12	Economics	7-13	3-6 hr.	$ 25.00
*Generation Gap	6 to 9	Sociology, Human Relations	2-6	1-2 hr.	$ 15.00
*Ghetto	7 to adult	Sociology, Contemporary Problems	10-20	2-5 hr.	$ 24.00
*Life Career	8 to 12	Human Relations	2-30	2-10 hr.	$ 35.00
WESTMINSTER PRESS, Witherspoon Building, Philadelphia, Pennsylvania 19107					
Center City	7 to adult	Sociology, Urban Problems	12-30	1-3 hr.	$ 25.00
WFF 'N PROOF, 1111 Maple Avenue, Turtle Creek, Pa. 15145					
*Propaganda	7 to adult	Behavorial Science, English, Logic, Political Science, Psychology, Sociology	4	1 hr.	$ 6.50
*Queries 'n Theories	7 to adult	Scientific Method	2-6	1-4 hr.	$ 8.75
WORLD AFFAIRS COUNCIL OF PHILADELPHIA, John Wanamakers Store, 13th and Market St., Philadelphia, Pa. 19017					
Simulation: The Decision-Making Model	9 to adult	International Relations	25-42	3-6 hr.	$ 3.50
WORLD WITHOUT WAR COUNCIL OF GREATER SEATTLE, 1514 N.E. 45th St., Seattle, Washington 98105					
World Without War Game	10 to adult	International Affairs, World Peace	30-40	5-7 hr.	$ 10.00

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	Paperbound	$ 6.95
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